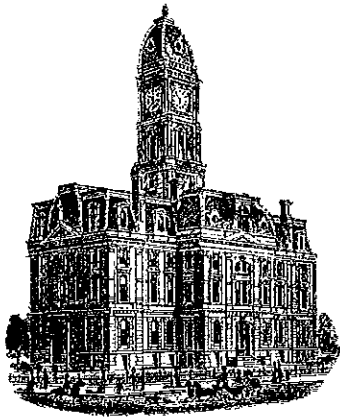


KCW



# SURVEYOR'S OFFICE Hamilton County

*Kenton C. Ward, CFM*  
*Surveyor of Hamilton County*  
*Phone (317) 776-8495*  
*Fax (317) 776-9628*

*Suite 188*  
*One Hamilton County Square*  
*Noblesville, Indiana 46060-2230*

October 2, 2015

To: Hamilton County Drainage Board

Re: Williams Creek Drain, Jackson's Grant Section 1B Arm

Attached is a petition filed by Silvara Development Company, LLC., along with a non-enforcement request, plans, calculations, quantity summary and assessment roll for Jackson's Grant Section 1B Arm, Williams Creek Drain to be located in Clay Township. I have reviewed the submittals and petition and have found each to be in proper form.

I have made a personal inspection of the land described in the petition. Upon doing so, I believe that the drain is practicable, will improve the public health, benefit a public highway, and be of public utility and that the costs, damages and expenses of the proposed drain will probably be less than the benefits accruing to the owners of land likely to be benefited. The drain will consist of the following:

12" RCP	3,445 ft.	6" SSD	15,331 ft.
15" RCP	1,632 ft.	12" SSD	133 ft.
18" RCP	655 ft.	15" SSD	153 ft.
21" RCP	632 ft.	24" SSD	213 ft.
24" RCP	160 ft.	Open Ditch	171 ft.

The total length of the drain will be 22,525 feet.

The open ditch listed above is 171 feet from Str. 635 to the confluence with Williams Creek Regulated Drain.

The dry detention basins (BMPs) located as listed below are not to be considered part of the regulated drain. Basin maintenance assumed by the Drainage Board shall only include the inlets and outlet as part of the regulated drain. The maintenance of the dry detention basins (BMPs) such as sediment removal and erosion control along the banks, mowing, aquatic vegetation maintenance and control, and anything required per the Storm Water Quality Maintenance and Operations Manual will be the responsibility of the Homeowners Association. The Board will also retain jurisdiction for ensuring the storage volume for which the pond was designed will be retained. Thereby, allowing no fill or easement encroachments.

Basin  
BMP 2A

Location  
Common Area #5

BMP 2B	Common Area #5
BMP 2C	Common Area #5
BMP 37	Common Area #5
BMP 9A	Common Area #4
BMP 9B	Common Area #4
BMP 11B	Common Area #2
BMP 7	Common Area #3
BMP 6C	Common Area #7
BMP 6A	Common Area #8
BMP 6B	Common Area #8
BMP 1A	Common Area #6
BMP 1B	Common Area #6
BMP 1C	Common Area #6
BMP 1D	Common Area #6
BMP 1E	Common Area #6

The subsurface drains (SSD) to be part of the regulated drain are those located under the curbs, those main lines in rear yards, and those in common areas. Only the main SSD lines as described below, which are located within the easement or right of way are to be maintained as regulated drain. Laterals for individual lots will not be considered part of the regulated drain. The portions of the SSD which will be regulated and maintained are as follows:

Curbline SSD in Streets:

Jackson's Grant Blvd.  
 Otto Lane  
 Dylan Drive  
 Bridgemont Lane  
 Hobby Horse Drive  
 Stableside Lane

Rear Yard SSDs:

Rear yard lots 35 & 36 from Str. 589 south to riser  
 Common Area #4 from Str. 570 east to riser  
 Common Area #4 from Str. 613 east to riser  
 Rear yard lots 12 & 13 from Str. 562 to Str. 560  
 Rear yard lots 13 to 15 from Str. 560 to Str. 608  
 Rear yard lots 16 & 17 from Str. 608 to Str. 559  
 Rear yard lots 18 to 21 from Str. 559 to Str. 578  
 Rear yard lots 24 to 25 from Str. 574 east to riser  
 Common Area #3 from Str. 546 to Str. 549  
 Common Area #3 from Str. 549 to Str. 555  
 Common Area #6 from Str. 607 to Str. 625  
 Common Area #6 from Str. 623 east to riser  
 Common Area #8 from Str. 603 to Str. 628  
 Common Area #8 from Str. 627 to Str. 597  
 Common Area #7 from Str. 580 east to riser  
 Rear yard lots 55 to 58 from Str. 585 west to riser  
 Rear yard lots 52 to 54 from Str. 587 west to riser  
 Rear yard lots 51 to 54 from Str. 587 east to riser  
 Rear yard lots 1 to 3 from Str. 577 east to riser  
 Common Area #2 from Str. 550 north to riser

I have reviewed the plans and believe the drain will benefit each lot equally. Therefore, I recommend each lot be assessed equally. I also believe that no damages will result to landowners by the construction of this drain. I recommend a maintenance assessment of \$65.00 per lot, \$10.00 per acre for common areas, with \$65.00 minimum, and \$10.00 per acre for roadways. With this assessment the total annual assessment for this drain will be \$5,369.90.

The petitioner has submitted surety for the proposed drain at this time. The sureties which are in the form of an Irrevocable Letter of Credit are as follows:

Agent: Standard Financial Corporation  
Date: May 26, 2015  
Number: 1156JG1B  
For: Storm Sewers  
Amount: \$678,878.40

I believe this proposed drain meets the requirements for Urban Drain Classification as set out in IC 36-9-27-67 to 69. Therefore, this drain shall be designated as an Urban Drain.

I recommend that upon approval of the above proposed drain that the Board also approve the attached non-enforcement request. The request will be for the reduction of the regulated drain easement to those easement widths as shown on the secondary plat for Jackson's Grant, Section 1B as recorded in the office of the Hamilton County Recorder.

I recommend the Board set a hearing for this proposed drain for November 23, 2015.



Kenton C. Ward, CFM  
Hamilton County Surveyor

KCW/pll

STATE OF INDIANA )  
 )  
COUNTY OF HAMILTON )

FILED

NOV 12 2014

TO: HAMILTON COUNTY DRAINAGE BOARD  
% Hamilton County Surveyor  
One Hamilton County Square, Suite 188  
Noblesville, IN. 46060-2230

OFFICE OF HAMILTON COUNTY SURVEYOR

In the matter of Jackson's Grant on Williams Creek Subdivision, Section  
1B Drain Petition.

Petitioner is the owner of all lots in the land affected by the proposed new regulated drain. The drainage will affect various lots in Jackson's Grant on Williams Creek, a subdivision in Hamilton County, Indiana. The general route of such drainage shall be in existing easements and along public roads as shown in the plans on file in the Surveyor's Office.

Petitioner believes that the cost, damages and expenses of the proposed improvement will be less than the benefits which will result to the owners of the land likely to be benefited thereby. Petitioner believes the proposed improvements will:

- (a) improve public health
- (b) benefit a public street
- (c) be of public utility

Petitioner agrees to pay the cost of construction of the drainage system and requests periodic maintenance assessments by the Board thereafter.

The Petitioner also agrees to the following:

1. To provide the Drainage Board a Performance Bond or Non-Revocable Letter of Credit for the portion of the drainage system which will be made a regulated drain. The bond will be in the amount of 120% of the Engineer's estimate. The bond will be in effect until construction of 100% of the system is completed and so certified by the Engineer.
2. The Petitioner shall retain an Engineer throughout the construction phase. At completion of the project the Petitioner's Engineer shall certify that the drainage system which is to be maintained as a regulated drain has been constructed as per construction plans.
3. The Petitioner agrees to request in writing to the County Surveyor any changes from the approved plan and must receive written authorization from the County Surveyor prior to implementation of the change. All changes shall be documented and given to the Surveyor to be placed in the Drain file.
4. The Petitioner shall instruct his Engineer to provide a reproducible print on a 24" x 36" Mylar of the final design of the Drainage System. This shall be submitted to the County Surveyor prior to the release of the Performance Bond.
5. The Petitioner shall comply with the Erosion Control Plan as specified on the construction plans. Failure to comply with the Erosion Control Plan shall be determined by the Board as being an obstruction to the drainage system. The County Surveyor shall immediately install or repair the needed measures at Petitioners cost as per IC 36-9-27-46.

The Petitioner further requests that the Drain be classified as an Urban Drain as per IC 36-9-27-69(d).

**RECORDED OWNER(S) OF LAND INVOLVED**

*JACKSON'S GRANT REAL ESTATE Co. LLC*

*Douglas B. Wagner*  
Signed

Douglas B. Wagner, *Dir. Res. Dev.*

Printed Name *JB DW. Co. LLC, its manager*

Date

Signed

Printed Name

Date

Signed

Printed Name

Date

Signed

Printed Name

Date

FINDINGS AND ORDER

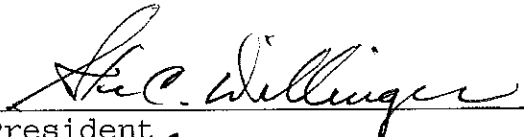
CONCERNING THE MAINTENANCE OF THE

Williams Creek Drain, Jackson's Grant Section 1B Arm

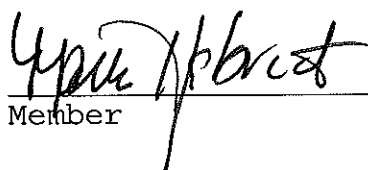
On this 23<sup>rd</sup> day of November, 2015, the Hamilton County Drainage Board has held a hearing on the Maintenance Report and Schedule of Assessments of the *Williams Creek Drain, Jackson's Grant Section 1B Arm*.

Evidence has been heard. Objections were presented and considered. The Board then adopted the original/amended Schedule of Assessments. The Board now finds that the annual maintenance assessment will be less than the benefits to the landowners and issues this order declaring that this Maintenance Fund be established.

HAMILTON COUNTY DRAINAGE BOARD

  
\_\_\_\_\_  
President

  
\_\_\_\_\_  
Member

  
\_\_\_\_\_  
Member

Attest:   
Executive Secretary



**STOEPPELWERTH**

ALWAYS ON

ofc: 317.849.5935  
fax: 317.849.5942

7965 East 106th Street  
Fishers, IN 46038-2505  
www.stoepfelwerth.com

May 4, 2015

Hamilton County Surveyor  
One Hamilton County Square, Suite 188  
Noblesville, Indiana 46038

Attention: Greg Hoyes

Re: Jackson's Grant on Williams Creek, Section 1B

Dear Mr. Hoyes:

On behalf of the developer Jackson's Grant Real Estate Company, LLC by JG Development Company, LLC its manager, please accept this Engineer's Estimate for Jackson's Grant on Williams Creek, Section 1B. The estimate is as follows:

**Storm Sewer**

	QTY	UNIT	UNIT \$	TOTALS
Manholes	5	EA	\$1,500.00	\$7,500.00
Beehives	17	EA	\$1,500.00	\$25,500.00
Outlet Control Structures (incl. stone at base)	16	EA	\$2,500.00	\$40,000.00
Double Curb Inlet	3	EA	\$2,400.00	\$7,200.00
Curb Inlet	40	EA	\$1,200.00	\$48,000.00
12" RCP (Bedding Included)	3432	LF	\$27.00	\$92,664.00
15" RCP (Bedding Included)	1583	LF	\$30.00	\$47,490.00
18" RCP (Bedding Included)	655	LF	\$32.00	\$20,960.00
21" RCP (Bedding Included)	633	LF	\$38.00	\$24,054.00
24" RCP (Bedding Included)	440	LF	\$46.00	\$20,240.00
Televising	6743	LF	\$1.00	\$6,743.00
Storm Sewer Misc.	1	LS	\$3,705.00	\$3,705.00
Granular Fill #53	3000	TONS	\$15.00	\$45,000.00
12" End Section w/ Debris Guard	16	EA	\$400.00	\$6,400.00
15" End Section w/ Debris Guard	8	EA	\$500.00	\$4,000.00

**LAND DEVELOPMENT SUPPORT SOLUTIONS**

18" End Section w/ Debris Guard	2	EA	\$600.00	\$1,200.00
24" End Section w/ Debris Guard	1	EA	\$800.00	\$800.00
Street SSD (Stone & Fabric Included)	13299	LF	\$8.00	\$106,392.00
BMP / Swale SSD - 6" (Stone & Fabric Included)	3794	LF	\$8.00	\$30,352.00
BMP SSD 12" (Stone & Fabric Included)	133	LF	\$12.00	\$1,596.00
BMP SSD 15" (Stone & Fabric Included)	136	LF	\$18.00	\$2,448.00
BMP SSD 24" (Stone & Fabric Included)	213	LF	\$26.00	\$5,538.00
Risers	2	EA	\$700.00	\$1,400.00
BMP Cleanouts	9	EA	\$350.00	\$3,150.00
Lot Services Each	67	EA	\$200.00	\$13,400.00
<b>Storm Sewer Subtotal</b>				<b>\$565,732.00</b>

**Monumentation**

	QTY	UNIT	UNITS	TOTALS
Lot Corners	67	EA	\$100.00	\$6,700.00
Centerline Monuments	32	EA	\$150.00	\$4,800.00
<b>Monumentation Subtotal</b>				<b>\$11,500.00</b>

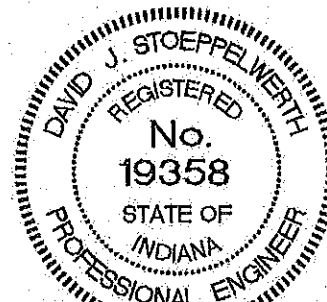
**TOTAL** **\$577,232.00**

If you have any questions or comments regarding this estimate, please call Brett A. Huff at (317) 570-4841.

Witness my signature this 4<sup>th</sup> day of May, 2015.



David J. Stoepfelwerth  
 Professional Engineer  
 No. 19358



Cc: Doug Wagner

BAH/meb  
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May 26, 2015

**Irrevocable Letter of Credit No.:1157JG1B**

HCDB-2015-00030  
TO: Hamilton County Commissioners  
1 Hamilton County Square, Suite 157  
Noblesville, In 46060

To Whom It May Concern:

We hereby authorize you to value on us for the account of:

Developer Name: Jackson's Grant Real Estate Company, LLC  
Developer Address: 3150 Republic Blvd., N., #3  
Toledo, OH 43615

For a sum or sums in United States of America Dollars not to exceed the aggregate total of **Thirteen Thousand Eight Hundred and no/100 Dollars (\$13,800.00)** by your draft(s) at sight.

The purpose of this Letter of Credit is for the performance of the installation of Monumentation in the Jackson's Grant, Section 1B.

The condition for payment of any drafts drawn against the Letter of Credit requires that the draft be accompanied by beneficiary's signed statement on Hamilton County letterhead stating that Jackson's Grant Real Estate Company, LLC has not performed or complied with the terms of the construction plan requirements of said project. The statement must also outline the specific deficiencies in construction.

All drafts must be marked, "Drawn under Standard Financial Corporation Letter of Credit No. 1157JG1B."

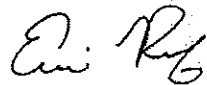
This credit is subject, so far as applicable, to "The Uniform Customs and Practice for Documentary Credits (2007 Revision), International Chamber of Commerce Publication No. 600.

This Letter of Credit is effective as of May 26, 2015, and shall expire on May 26, 2016 but such expiration date shall be automatically extended for a period of one year on May 26, 2016, and on each successive expiration date, unless a release is received from the Hamilton County Commissioners, or we notify both the Hamilton County Commissioners and Jackson's Grant Real Estate Company, LLC by certified mail, at least ninety (90) days before the current expiration date, that we have decided not to extend this Letter of Credit beyond the current

 **Standard Financial**  
C O R P O R A T I O N

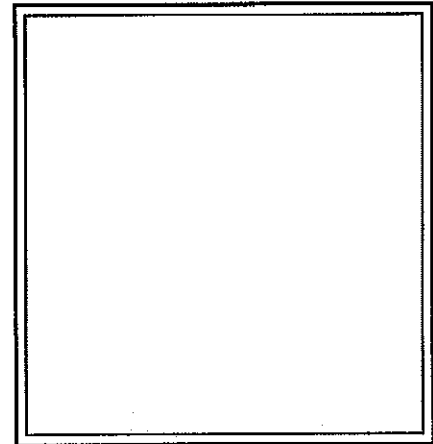
expiration date. In the event of such notification by us, the credit established by this Letter shall be available to the Hamilton County Commissioners upon its sight draft or demand for payment for ninety (90) days after receipt of such notice by the Hamilton County Commissioners as shown on the signed return receipt.

We hereby agree with you that all drafts drawn under and in compliance with the terms of this credit shall be duly honored on due presentation to the main office of Standard Financial Corporation, 13578 E. 131<sup>st</sup> Street, Suite 200, Fishers, IN 46037.



Eric Roof  
Authorized Signer

Corporate Seal



*This Letter of Credit is not valid unless the seal of Standard Financial Corporation is affixed hereto.*

13578 E. 131<sup>st</sup> Street, Suite 200 • Fishers, Indiana 46037  
Phone: 317-773-8353 • [www.standardfincorp.com](http://www.standardfincorp.com)

May 26, 2015

**Irrevocable Letter of Credit No.:1156JG1B**

HADB-2015-00029  
TO: Hamilton County Commissioners  
1 Hamilton County Square, Suite 157  
Noblesville, IN 46060

To Whom It May Concern:

We hereby authorize you to value on us for the account of:

Developer Name: Jackson's Grant Real Estate Company, LLC  
Developer Address: 3150 Republic Blvd., N., #3  
Toledo, OH 43615

For a sum or sums in United States of America Dollars not to exceed the aggregate total of **Six Hundred Seventy-Eight Thousand Eight Hundred Seventy-Eight and 40/100 Dollars (\$678,878.40)** by your draft(s) at sight.

The purpose of this Letter of Credit is for the performance of the installation of Storm Sewers in the Jackson's Grant, Section 1B.

The condition for payment of any drafts drawn against the Letter of Credit requires that the draft be accompanied by beneficiary's signed statement on Hamilton County letterhead stating that Jackson's Grant Real Estate Company, LLC has not performed or complied with the terms of the construction plan requirements of said project. The statement must also outline the specific deficiencies in construction.

All drafts must be marked, "Drawn under Standard Financial Corporation Letter of Credit No. 1156JG1B."

This credit is subject, so far as applicable, to "The Uniform Customs and Practice for Documentary Credits (2007 Revision), International Chamber of Commerce Publication No. 600.

This Letter of Credit is effective as of May 26, 2015, and shall expire on May 26, 2016 but such expiration date shall be automatically extended for a period of one year on May 26, 2016, and on each successive expiration date, unless a release is received from the Hamilton County Commissioners, or we notify both the Hamilton County Commissioners and Jackson's Grant Real Estate Company, LLC by certified mail, at least ninety (90) days before the current expiration date, that we have decided not to extend this Letter of Credit beyond the current

 **Standard Financial**  
C O R P O R A T I O N

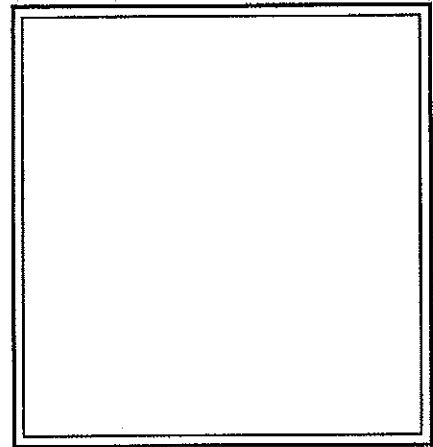
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We hereby agree with you that all drafts drawn under and in compliance with the terms of this credit shall be duly honored on due presentation to the main office of Standard Financial Corporation, 13578 E. 131<sup>st</sup> Street, Suite 200, Fishers, IN 46037.



Eric Roof  
Authorized Signer

Corporate Seal



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13578 E. 131<sup>st</sup> Street, Suite 200 • Fishers, Indiana 46037  
Phone: 317-773-8353 • [www.standardfincorp.com](http://www.standardfincorp.com)

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD  
IN THE MATTER OF

*Williams Creek Drain, Jackson's Grant Section 1B Arm*

NOTICE

To Whom It May Concern and: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Notice is hereby given of the hearing of the Hamilton County Drainage Board on the **Williams Creek Drain, Jackson's Grant Section 1B Arm** on **November 23, 2015** at **9:00 A.M.** in Commissioners Court, Hamilton County Judicial Center, One Hamilton County Square, Noblesville, Indiana, and which construction and maintenance reports of the Surveyor and the Schedule of Assessments made by the Drainage Board have been filed and are available for public inspection in the office of the Hamilton County Surveyor.

Hamilton County Drainage Board

Attest: Lynette Mosbaugh

ONE TIME ONLY

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD  
IN THE MATTER OF THE

Williams Creek Drain, Jackson's Grant Section 1B Arm

NOTICE

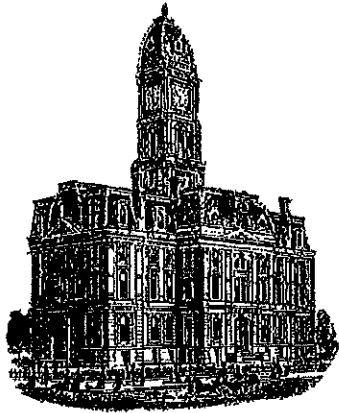
Notice is hereby given pursuant to Section 405 of the 1965 Indiana Drainage Code that this Board, prior to final adjournment on **November 23, 2015** has issued an order adopting the Schedule of Assessments, filed the same and made public announcement thereof at the hearing and ordered publication. If judicial review of the findings and order of the Board is not requested pursuant to Article Eight of this code within twenty (20) days from the date of this publication, the order shall be conclusive.

Hamilton County Drainage Board

Attest: Lynette Mosbaugh

ONE TIME ONLY

KCW



SURVEYOR'S OFFICE  
**Hamilton County**

*Kenton C. Ward, CFM*  
*Surveyor of Hamilton County*  
*Phone (317) 776-8495*  
*Tax (317) 776-9628*

*Suite 188*  
*One Hamilton County Square*  
*Noblesville, Indiana 46060-2230*

**To: Hamilton County Drainage Board**

**May 2, 2017**

**Re: Williams Creek – Jackson’s Grant Section 1B**

Attached are as-built, certificate of completion & compliance, and other information for Jackson’s Grant Section 1B. An inspection of the drainage facilities for this section has been made and the facilities were found to be complete and acceptable.

During construction, changes were made to the drain, which will alter the plans submitted with my report for this drain-dated October 2, 2015. The report was approved by the Board at the hearing held November 23, 2015. (See Drainage Board Minutes Book 16, Pages 366-8) The changes are as follows: the 12” RCP was shortened from 3445 to 3433. The 15” RCP was shortened from 1632 feet to 1562 feet. The 18” RCP was shortened from 655 feet to 650 feet. The 24” RCP was lengthened from 160 feet to 161 feet. The 6” SSD was lengthened from 15,331 feet to 15,337 feet. The 15” SSD was shortened from 153 feet to 151 feet. The open ditch was lengthened from 171 feet to 181 feet. The length of the drain due to the changes described above is now **22,453 feet**.

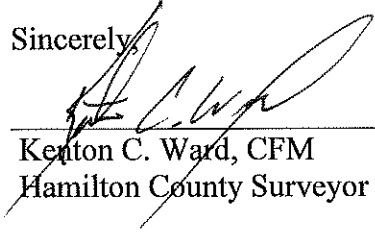
The non-enforcement was approved by the Board at its meeting on November 23, 2015 and recorded under instrument #2016032998. The ownership and maintenance for all the BMP’s are outlined in the OEM manual and recorded in the Hamilton County Recorder’s office under instrument # 2016011090.

The following sureties were guaranteed by Standard Financial Corp and released by the Board on its May 8, 2017 meeting.

Bond-LC No: 1156JG1B  
Amount: \$678,878.40  
For: Storm Sewers  
Issue Date: May 26, 2015

I recommend the Board approve the drain's construction as complete and acceptable.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kenton C. Ward', is written over a horizontal line. The signature is stylized and cursive.

Kenton C. Ward, CFM  
Hamilton County Surveyor



FILED

APR 19 2016

OFFICE OF HAMILTON COUNTY SURVEYOR


**CERTIFICATE OF COMPLETION AND COMPLIANCE**

To: Hamilton County Surveyor

Re: Jackson's Grant on Williams Creek, Section 1B

I hereby certify that:

1. I am a Registered Land Surveyor or Engineer in the State of Indiana.
2. I am familiar with the plans and specifications for the above referenced subdivision.
3. I have personally observed and supervised the completion of the drainage facilities for the above referenced subdivision.
4. The drainage facilities within the above referenced subdivision to the best of my knowledge, information and belief have been installed and completed in conformity with all plans and specifications.

Signature:  Date: April 19, 2016

Type or Print Name: Dennis D. Olmstead

Business Address: Stoeppelwerth & Associates, Inc.

7965 East 106<sup>th</sup> Street, Fishers, Indiana 46038

Telephone Number: (317) 849-5935

SEAL

INDIANA REGISTRATION NUMBER

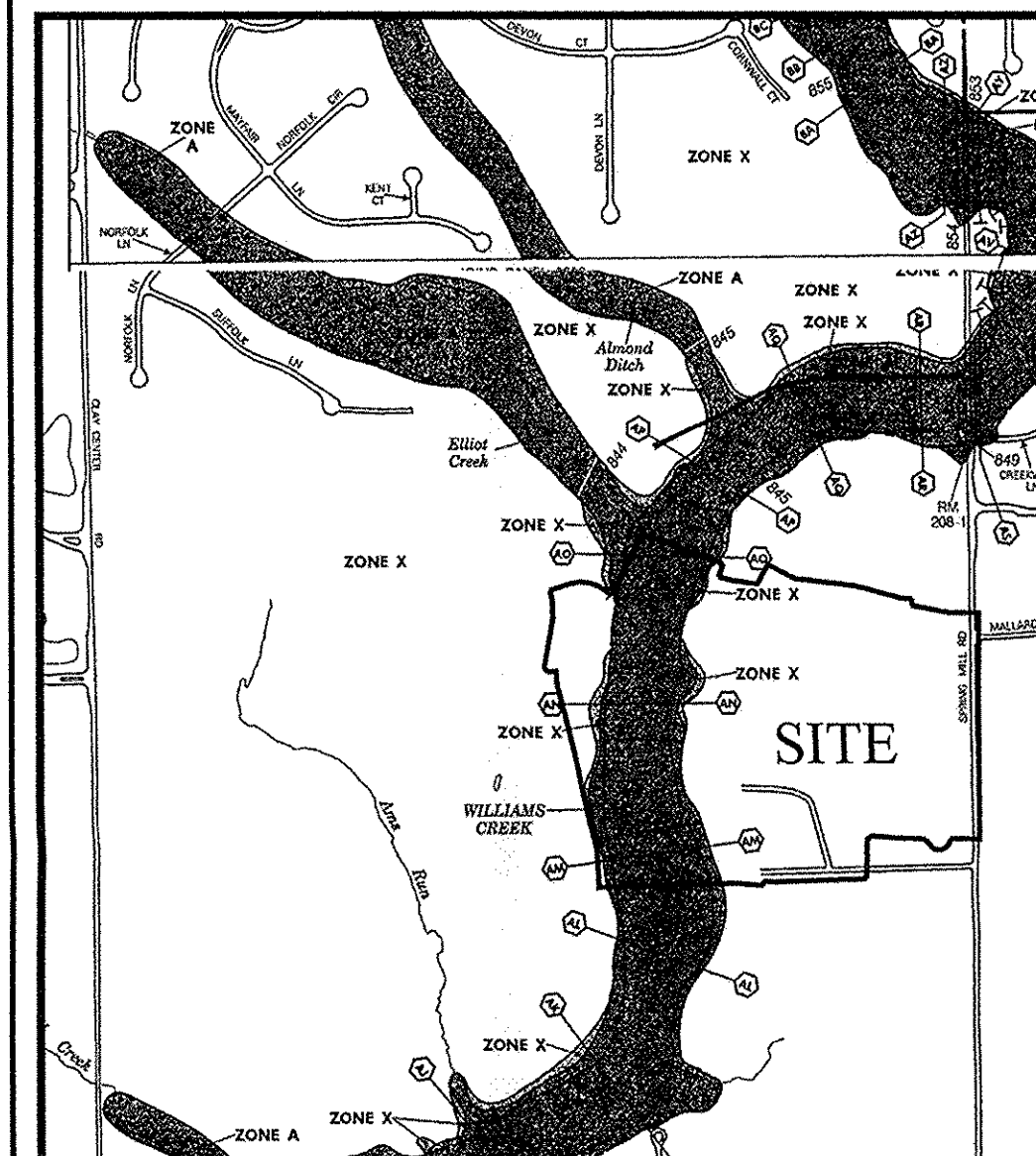
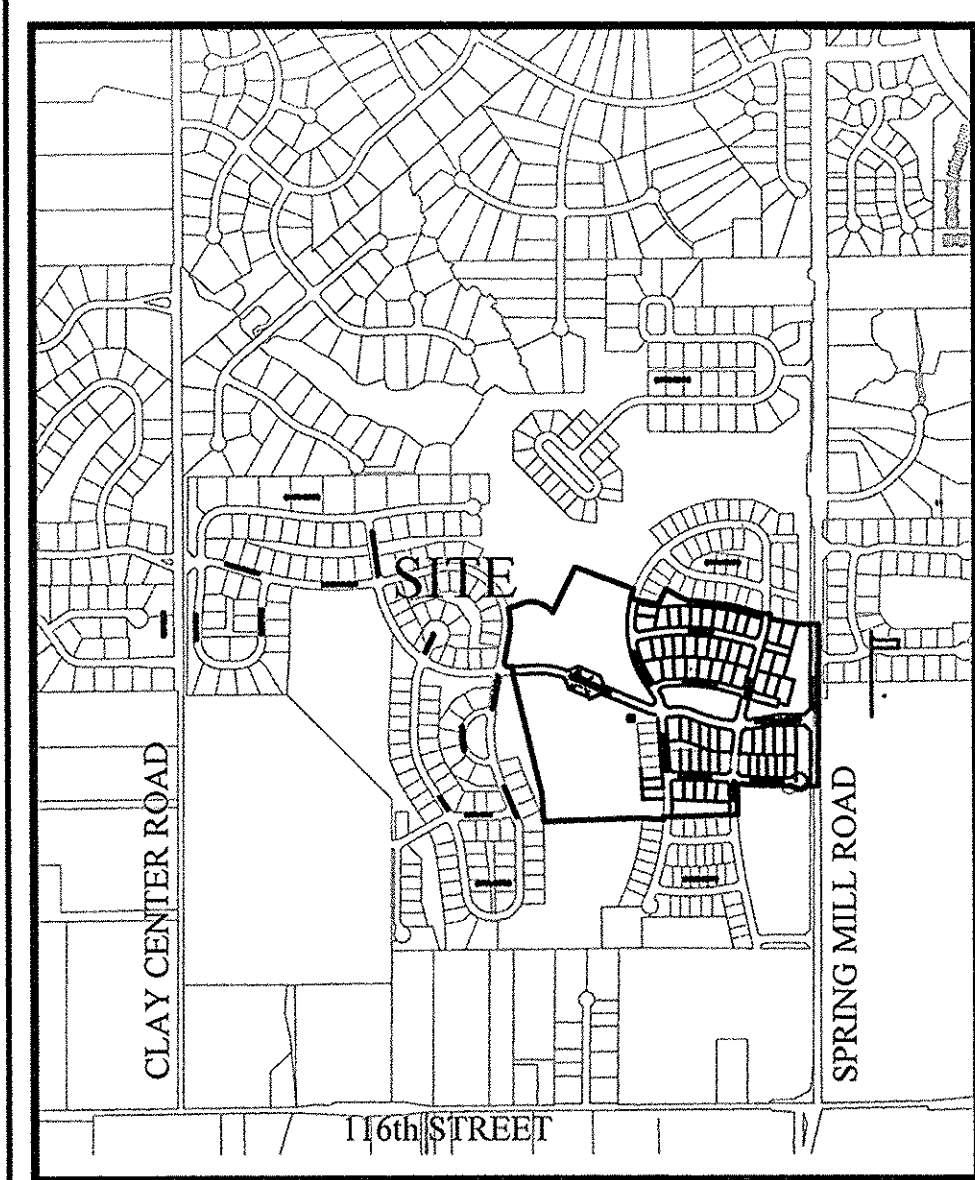
900012



# JACKSON'S GRANT

## SECTION 1B

Developed by:  
**Jacksons Grant Real Estate Co., LLC**  
**13578 East 131st Street**  
**Suite 200**  
**Fishers, Indiana 46037**  
**Phone: (317) 770-1818**  
**Fax: (317) 770-1819**  
**Contact Person: DOUG WAGNER**  
**email: dwagner@republicdev.com**



DESIGN DATA

DESIGN SPEED = 25 M.P.H.

OTTO LANE	1271.25 L.F.
HOBBY HORSE DRIVE	1394.88 L.F.
STABLESIDE LANE	791.74 L.F.
DYLAN DR.	811.23 L.F.
JACKSON'S GRANT BLVD.	1966.87 L.F.
BRIDGEMONT LANE	600.04 L.F.
TOTAL	6,836.01 L.F.

OPERATING AUTHORITY  
 CITY OF CARMEL (317) 571-2441  
 ONE CIVIC SQUARE  
 CARMEL, INDIANA 46032

FLOOD STATEMENT  
 PORTION OF THIS SITE LIES WITHIN FLOODPLAIN PER FIRM  
 18057C0206F & 18057C0208F DATED FEB. 19, 2003

ZONING  
 PUD

Planning Area	Minimum Lot		Minimum Yard Setbacks			Min. Dwelling Unit Size (sf)		Max. Lot Coverage	
	Width	Area (sf)	Street Frontage	Front	Side (Aggregate)	Rear	1-story		2-story
Bridgemont - (formerly known as Bridgecreek)	55'	6,600	50'	25'	5' (10')	20'	1600	2000	50%
Stableside - (formerly known as Village Neighborhood)	55'	6,600	50'	25'	5' (10')	20'	1600	2000	50%
	65'	7,500	35'	25'	5' (10')	20'	1600	2000	

**\*\*CONSTRUCTION IN THE FLOODWAY**  
**ANY CONSTRUCTION ACTIVITY PROPOSED**  
**WITHIN THE FLOODWAY LIMITS SHOWN WITHIN**  
**THESE CONSTRUCTION PLANS WILL BE**  
**DEFERRED UNTIL STATE PERMIT IS APPROVED.**

INDEX  
 DESCRIPTION

SHT.	DESCRIPTION
C001	TITLE SHEET
C100-C103	TOPOGRAPHICAL SURVEY/TREE CONSERVATION PLAN
C200-C207	SITE DEVELOPMENT PLAN/STORM CHART AND PIPE CHART/EMERGENCY FLOOD ROUTE
WC-1-WC10	WILLIAMS CREEK BMP POND SECTIONS
C300-C312	EROSION CONTROL PLAN/SWPP DETAILS AND SPECIFICATIONS
C400-C415	STREET PLAN AND PROFILES/INTERSECTION DETAILS/TRAFFIC MAINTENANCE/PAVING POLICIES
C500-C504	SANITARY SEWER PLAN AND PROFILES
C600-C607	STORM SEWER PLAN AND PROFILES/SUMP PLAN
C700-702	WATER PLAN
C800-C805	CONSTRUCTION DETAILS AND SPECIFICATIONS

REVISIONS

SHT.	DESCRIPTIONS
ALL	REVISED PER TAC COMMENTS - 07/25/14 - JSM
ALL	REVISED PER TAC COMMENTS - 08/22/14 - JSM
ALL	REVISED PER TAC COMMENTS - 10/10/14 - JSM
ALL	REVISED PER COMMENTS - 11/03/14 - JSM
C100-C104 & C300-C312	REVISED PER SWPPP COMMENTS - 11/14/14 - JSM
C300-C312	REVISED PER SWPPP COMMENTS - 01/29/15 - JSM
ALL	REVISED PER REVIEW COMMENTS - 03/02/15 - JSM
ALL	REVISED PER COMMENTS - 04/06/15 - HAM
C200, C204, C601, C602A	REVISED BMP LAYOUT PER CLIENT REQUEST-10/30/15-JSM
C300, C504, C600, C607, C700-C702	ASBUILT, TS-04/07/16-GEH

UTILITY CONTACTS:

Clay Township Regional Waste District  
 10701 College Avenue  
 Indianapolis, Indiana 46280

Carmel Water Utilities  
 3450 West 131st Street  
 Westfield, IN 46074

AT & T  
 5858 North College Avenue  
 Indianapolis, Indiana 46220

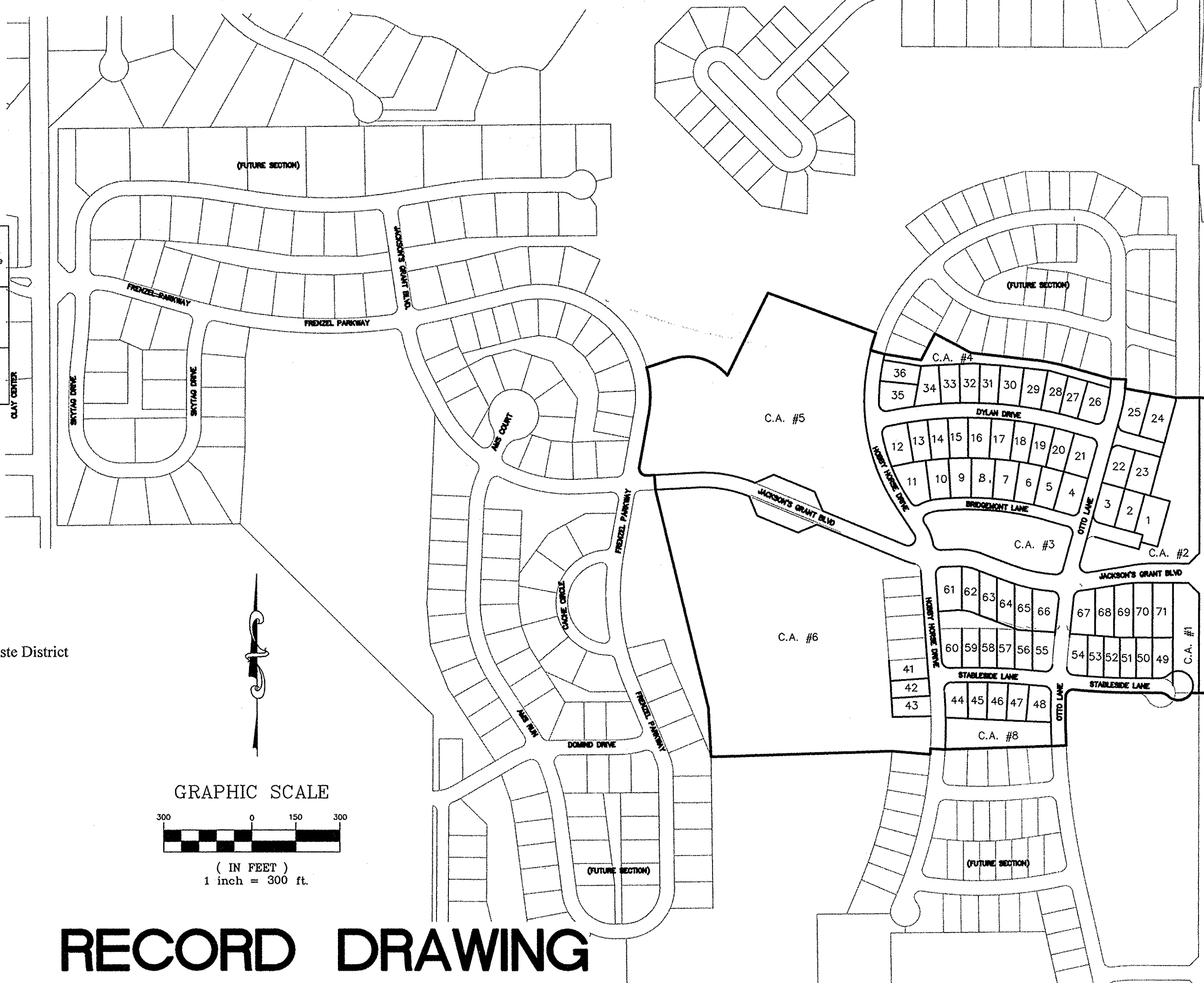
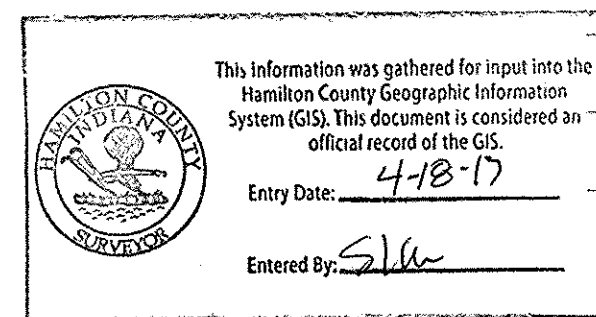
BrightHouse Networks  
 3030 Roosevelt Avenue  
 Indianapolis, Indiana 46218

Duke Energy  
 16475 Southpark Drive  
 Westfield, Indiana 46074

Indianapolis Power & Light Company  
 3600 North Arlington Avenue  
 Indianapolis, Indiana 46218

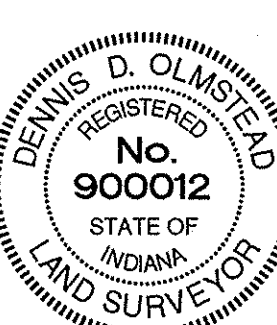
Vectren Energy  
 16000 Allisonville Road  
 Noblesville, Indiana 46060

ESTATES	SINGLE FAMILY LOTS	
	72-81, 88-104	82-87, 105-150
CREEKSIDE		



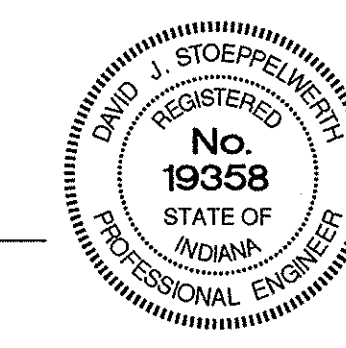
## RECORD DRAWING

Dennis D. Olmstead  
 Registered Land Surveyor  
 No. 900012  
 04/11/2016

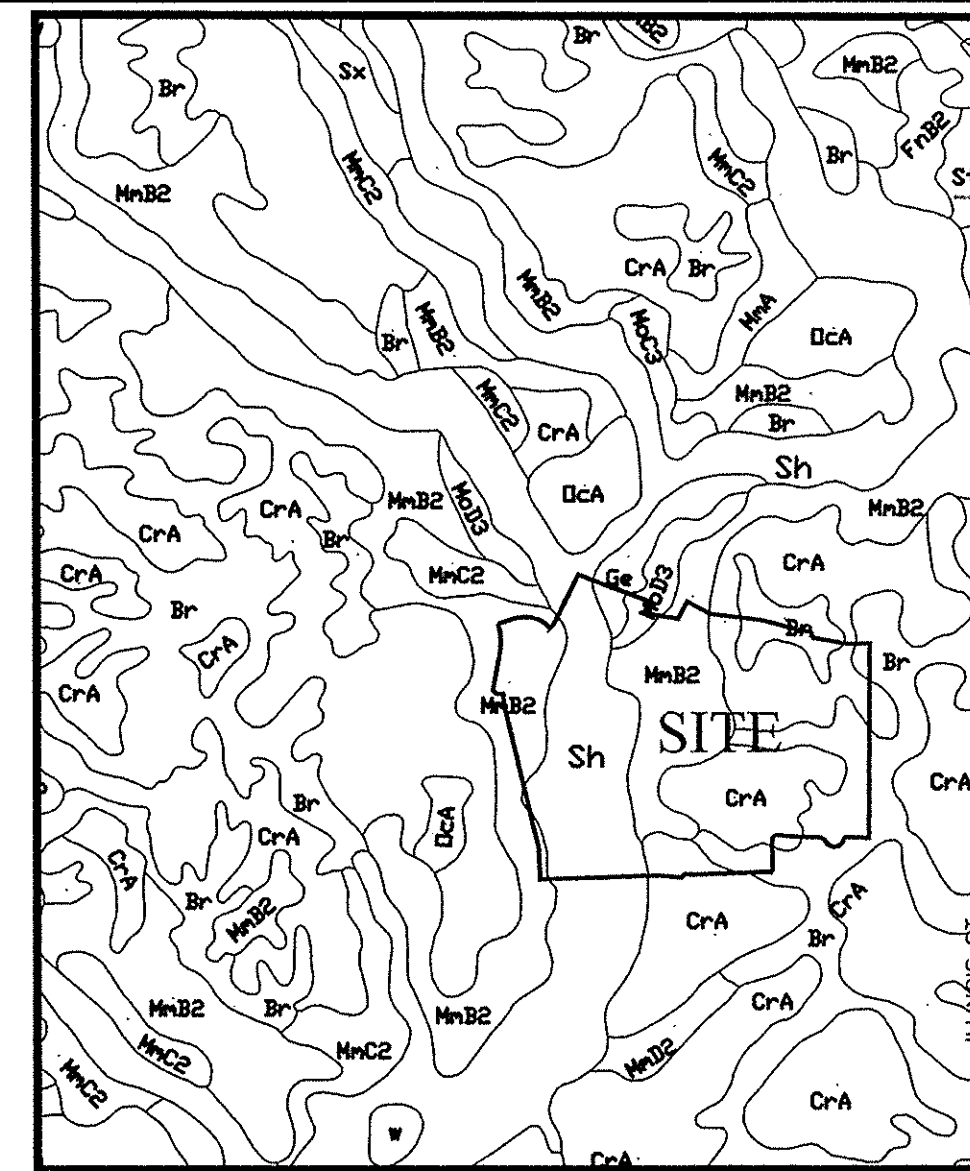


PLANS CERTIFIED BY:

David J. Stoeppelwerth  
 DAVID J. STOEPPELWERTH  
 PROFESSIONAL LAND SURVEYOR  
 NO. 19358  
 3/21/14



PLANS PREPARED BY:  
**STOEPPELWERTH & ASSOCIATES, INC.**  
**CONSULTING ENGINEERS & LAND SURVEYORS**  
**7965 E. 106TH STREET, FISHERS, INDIANA 46038**  
**PHONE: (317)-849-5935**  
**FAX: (317)-849-5942**  
**CONTACT PERSON: BRETT A. HUFF**  
**EMAIL: BHUFF@STOEPPELWERTH.COM**



Map Unit: Br - Brookston silt clay loam  
 This poorly drained soil has a seasonal high water table above the surface or within 1.0 ft. and is in depressions. Slopes are 0 to 2 percent. The native vegetation is water tolerant grasses and hardwoods. The surface layer is silty clay loam and has moderate or high organic matter content (2.0 to 5.0 percent). Permanently or moderately slow (0.2 to 0.6 inch) in the most restrictive layer above 60 inches. Available water capacity is high (10.0 inches in the upper 60 inches). The pH of the surface layer in non-limed areas is 6.1 to 7.3. This soil is hydric. Wetness is a management concern for crop production. This soil responds well to tile drainage.

Map Unit: CrA - Crosby silt loam, 0 to 2 percent slopes  
 CrA - Crosby silt loam, 0 to 2 percent slopes  
 This is a somewhat poorly drained soil and has a seasonal high water table at 0.5 to 2.0 ft. and is on rises on uplands. Slopes are 0 to 2 percent. The native vegetation is hardwoods. The surface layer is silty clay loam and has moderate or high organic matter content (1.0 to 3.0 percent). Permanently or moderately slow (0.2 to 0.6 inch) in the most restrictive layer above 60 inches. Available water capacity is moderate (6.2 inches in the upper 60 inches). The pH of the surface layer in non-limed areas is 5.1 to 6.0. Droughtiness and wetness are management concerns for crop production. This soil responds well to tile drainage.

MmB2 - Miami silt loam, 2 to 6 percent slopes, eroded  
 MmB2 - Miami silt loam, 2 to 6 percent slopes, eroded  
 This gently sloping, deep, well drained soil is on rises on till plains and along drainageways and streams. The mapped areas range from 3 to 50 acres in size. In a typical profile the surface layer is dark grayish brown silt loam about 10 inches thick. The subsoil is dark yellowish brown and brown, firm clay loam about 23 inches thick. The substratum, to a depth of 60 inches, is yellowish brown loam that contains free carbonates. In a few areas the lower part of the subsoil is stratified sandy loam, loamy sand and sandy clay loam. The depth to till is more than 40 inches in some areas. Included with this soil in mapping are small areas of severely eroded soils that have a surface layer of clay loam, small areas of soils with slopes of more than 6 percent, and small areas of soils that have gravel and cobbles on the surface.

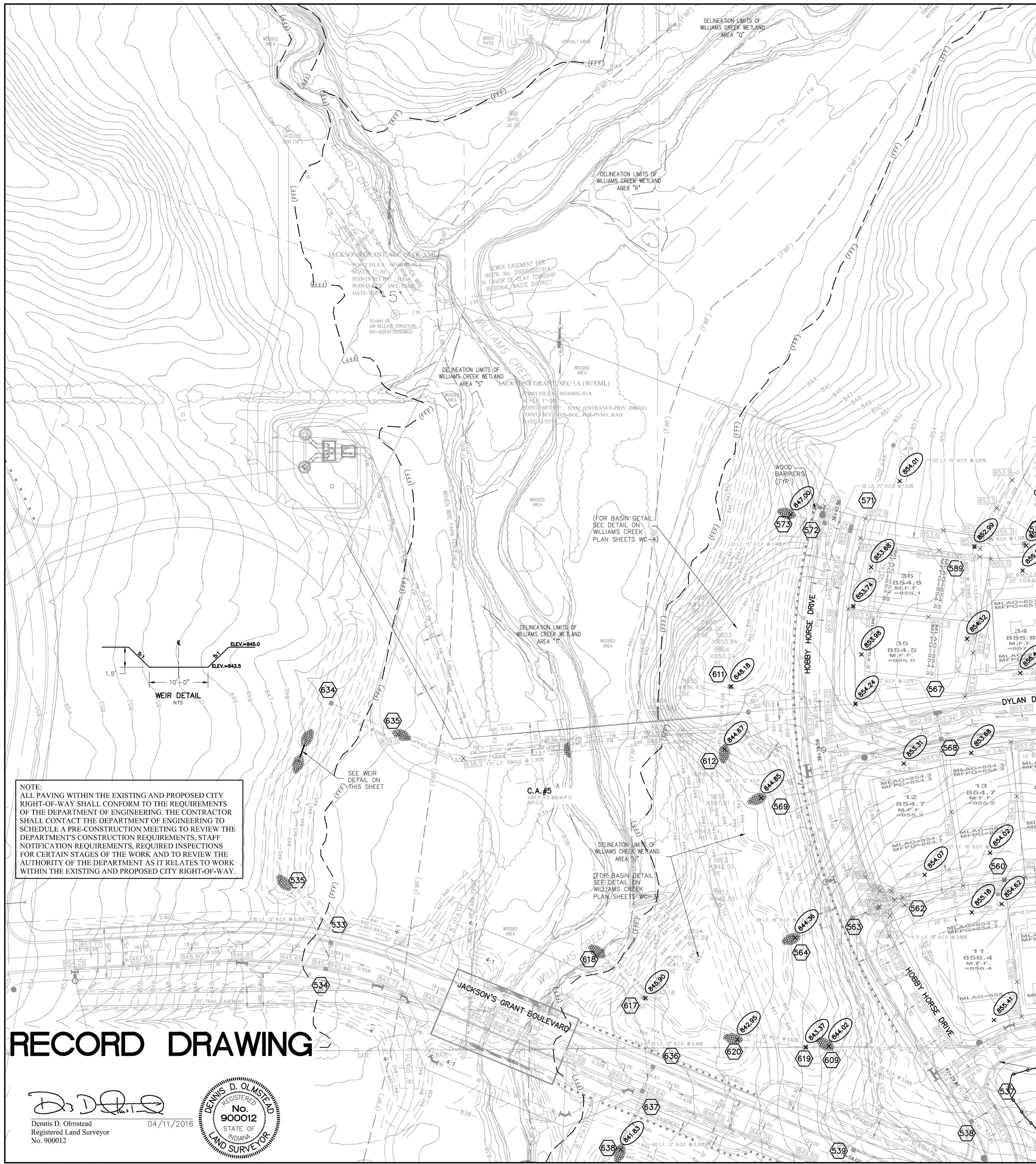
MmC2 - Miami silt loam, 6 to 12 percent slopes  
 MmC2 - Miami silt loam, 6 to 12 percent slopes  
 This moderately sloping, deep, well drained soil is on knobs and breaks along streams and drainageways on uplands. The mapped areas are irregular in shape and range from 3 to 25 acres in size. In a typical profile the surface layer is brown silt loam about 5 inches thick. The subsoil is brown or dark yellowish brown, firm clay loam about 22 inches thick. The substratum, to a depth of 60 inches, is yellowish brown calcareous loam. In many areas the solum is less than 24 inches thick. In some areas the subsoil is redder and contains more gravel.

MmD3 - Miami silt loam, 12 to 18 percent  
 MmD3 - Miami silt loam, 12 to 18 percent  
 This strongly sloping, deep, well drained soil is on breaks along streams and drainageways. The mapped areas are irregular in shape and range from 3 to 15 acres in size. In a typical profile the surface layer is dark brown, clay loam about 5 inches thick. The subsoil is dark yellowish brown, firm clay loam about 19 inches thick. The substratum, to a depth of 60 inches, is yellowish brown loam. In some areas calcareous glacial till is at the surface. Cobbles and gravel are in the surface layer in most areas. In many areas the subsoil is gravely loam or clay loam.

OcA - Ockley silt loam, 0 to 2 percent slopes  
 OcA - Ockley silt loam, 0 to 2 percent slopes  
 This nearly level, deep, well drained soil is mainly on broad terraces. It is also on small rises on uplands. Most of the mapped areas are elongated and are parallel to major streams. Some areas on uplands are irregular in shape. The mapped areas range from 2 to 250 acres in size. In a typical profile the surface layer is dark grayish brown silt loam about 10 inches thick. The subsoil is about 46 inches thick. The upper part of the subsoil is brown, friable loam; the next part is dark yellowish brown and brown, firm clay loam; the next part is dark yellowish brown, firm loam; and the lower part is dark reddish brown, firm gravelly sandy clay loam. The underlying material to a depth of 70 inches, is stratified sand and gravelly sand. The depth to loose sand and gravel is as much as 80 inches in places. The combined thickness of the surface layer and the part of the subsoil that formed in silty material is as much as 30 inches in some places. In the east-central part of the county, many limestone fragments that are as much as 12 inches in diameter are in the soil. In some areas on uplands, the underlying material is sand and silt and the subsoil has little or no gravel. Thickness of the sand and gravel ranges from a few feet along minor streams and on uplands to more than 50 feet along White River.

Sh - Shoals silt loam  
 Sh - Shoals silt loam  
 This nearly level, deep, and somewhat poorly drained soil is on floodplains. It is subject to frequent flooding. The mapped areas are mostly elongated and are parallel to major streams. Many areas are in narrow valleys. The mapped areas range in size from 3 to 100 acres in size. In a typical profile the surface layer is dark grayish brown silt loam about 11 inches thick. The underlying material, to a depth of 39 inches is dark grayish brown and grayish brown, mottled silt loam and loam. Below this to a depth of 56 inches, it is gray and very dark gray sandy loam and sandy clay loam. Below this, to a depth of 60 inches, it is grayish brown fine gravel and coarse sand. In small areas scattered throughout the county, this soil has darker surface layer; in some of these areas it is near Ross soils. In some places the underlying material has more gravel. This soil has carbonates throughout the profile in some areas. In some small areas in the upper reaches of small streams, this soil has firm loam till at a depth of 45 to 60 inches. In some small areas it has less clay and more sand between a depth of 10 and 40 inches. In some areas sand and gravelly sand are at a depth of only 40 inches.

S:\60160SIL-S\BID\WG\200\_Site Development Plans.dwg - C200  
 March 14, 2019 10:28:35 AM / kmitchell  
 March 14, 2019 10:30:18 AM / Kenny Mitchell



**NOTE:**  
 ALL PAVING WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF ENGINEERING. THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF ENGINEERING TO SCHEDULE A PRE-CONSTRUCTION MEETING TO REVIEW THE DEPARTMENT'S CONSTRUCTION REQUIREMENTS, STAFF NOTIFICATION REQUIREMENTS, REQUIRED INSPECTIONS FOR CERTAIN STAGES OF THE WORK AND TO REVIEW THE AUTHORITY OF THE DEPARTMENT AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY.

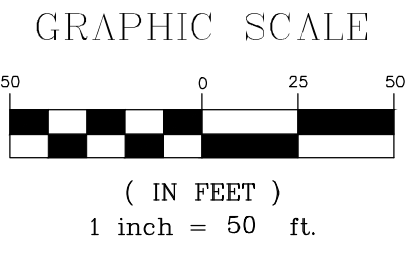
# RECORD DRAWING

*D. D. Olmstead*  
 Dennis D. Olmstead  
 Registered Land Surveyor  
 No. 900012



04/11/2016

**NOTES TO CONTRACTOR:**  
 ALL PADS SHOULD BE TESTED TO ASSURE A COMPACTION OF AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY USING THE STANDARD PROCTOR TEST METHOD.  
 ANY PRIVATE TILES LOCATED ON THIS SITE WILL NEED TO BE LOCATED, BREATHERS SET AT THE DOWNSTREAM PROPERTY LINE AND CRUSHED OR REMOVED ACROSS THIS SITE. IF ANY OF THESE TILES EXTEND BEYOND THE LIMITS OF THIS PROJECT, THEY WILL NEED TO BE PROVIDED A POSITIVE OUTLET AND ALLOWED TO CONTINUE TO FUNCTION, AS IT IS ILLEGAL TO BLOCK OFF A PRIVATE "MUTUAL" TILE.  
 CONTRACTOR SHALL VERIFY DEPTHS OF ALL EXISTING ON-SITE UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM THERE IS NOT ANY CONFLICTS WITH OTHER UTILITIES, STORM SEWERS OR STREETS. CONFLICTS AFTER CONSTRUCTION BEGINS ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY.  
 CONTRACTOR SHALL CONTACT THE DEPARTMENT OF ENGINEERING TO SCHEDULE A PRE-CONSTRUCTION MEETING TO REVIEW THE DEPARTMENT'S CONSTRUCTION REQUIREMENTS, STAFF NOTIFICATION REQUIREMENTS, REQUIRED INSPECTIONS FOR CERTAIN STAGES OF WORK TO REVIEW THE AUTHORITY OF THE DEPARTMENT AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED CITY R.W.  
 EXISTING PAVEMENT TO BE SAW CUT TO A CLEAN EDGE ADJACENT TO ANY WIDENING, AUXILIARY LANES, ETC.  
 NO EARTH DISTURBING ACTIVITY MAY TAKE PLACE WITHOUT AN APPROVED STORM WATER MANAGEMENT PERMIT.  
 THERE IS TO BE NO DRIVEWAY ENCROACHMENTS INTO EASEMENTS BETWEEN LOTS.  
 UTILITY RELOCATIONS REQUIRED BY THE PROJECT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. UTILITY LINE RELOCATIONS REQUIRED FOR ROAD PROJECTS THAT RESULT IN A CONFLICT WITH PROPOSED DEVELOPMENT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO RESOLVE WITH THE UTILITY. EXISTING POLE LINES REQUIRED TO BE RELOCATED TO WITHIN ONE FOOT OF PROPOSED RIGHT-OF-WAY LINE.



**CONTACT:**  
 CARMEL UTILITIES (317) 571-2648 FOR WATER LOCATES  
**FOR SANITARY SEWER LOCATES**  
 CONTACT: CLAY TOWNSHIP REGIONAL WASTE DISTRICT (317) 844-9200

**NOTE:**  
**FOR STORM AND PIPE CHARTS SEE SHEET C205**

Minimum Flood Protection Grades  
 From Sections 104.02, 302.08 and 303.07 of the City of Carmel Storm Water Technical Standards Manual

- Definitions
  - Minimum Flood Protection Grade of all structures fronting a pond or open ditch shall be no less than 2 feet above any adjacent 100-year local or regional flood elevations, whichever is greater, for all windows, doors, pipe entrances, window wells, and any other structure member where floodwaters can enter a building. Lowest Adjacent Grade is the elevation of the lowest grade adjacent to a structure, where the soil meets the foundation around the outside of the structure (including structural members such as basement walkout, patios, decks, porches, support posts or piers, and rim of the window well).
  - Standard: Lowest Adjacent Grade
    - General
      - The Lowest Adjacent Grade for residential, commercial, or industrial buildings shall have two feet of freeboard above the flooding source's 100-year flood elevation under proposed conditions.
      - For areas outside a Special Flood Hazards Area (SFHA) or FEMA or IDNR designated floodplain
        - The Lowest Adjacent Grade for all residential, commercial, or industrial buildings adjacent to ponds shall be set a minimum of 2 feet above the 100-year pond elevation or 2 feet above the emergency overflow weir elevation, whichever is higher.
        - The Lowest Adjacent Grade for all residential, commercial, or industrial buildings shall be set a minimum of 2 feet above the highest noted overflow path/ponding elevation across the property frontage. In addition to the Lowest Adjacent Grade requirements, any basement floor must be at least a foot above the normal water level of any wet-bottom pond.

**STORM SEWER FOR THIS PROJECT WILL BE PUBLIC.**  
**ALL STORM SEWERS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE RCP CLASS III.**

- EARTHWORK:**
- EXCAVATION**
    - Excavated material that is suitable may be used for fills. All unsuitable material and all surplus excavated material not required shall be removed from the site.
    - Provide and place any additional fill material from offsite as may be necessary to produce the grades required on plans. Fill obtained from offsite shall be of quality as specified for fills herein and the source approved by the Developer. It will be the responsibility of the Contractor for any costs for fill needed.
  - REMOVAL OF TREES**
    - All trees and stumps shall be removed from areas to be occupied by a road surface or structure area. Trees and stumps shall not be buried on site.
  - PROTECTION OF TREES**
    - The Contractor shall, at the direction of the Developer, endeavor to save and protect trees of value and worth which do not impair construction of improvements as designed.
    - In the event cut or fill exceeds 0.5 foot over the root area, the Developer shall be consulted with respect to protective measure to be taken, if any, to preserve such trees.
  - REMOVAL OF TOPSOIL**
    - All topsoil shall be removed from all areas beneath future pavements or building. Topsoil removal shall be to a minimum depth of 6 inches or to the depth indicated in the geotechnical report provided by the Developer to be excavated or filled. Topsoil should be stored at a location where it will not interfere with construction operations. The topsoil shall be free of debris and stones.
  - UTILITIES**
    - Rules and regulation governing the respective utility shall be observed in executing all work under this section.
    - It shall be the responsibility of the Contractor to determine the location of existing underground utilities 2 working days prior to commencing work. For utility locations to be marked call Toll Free 1-800-382-5544 within Indiana or 1-800-428-5200 outside Indiana.
  - SITE GRADING**
    - Do all cutting, filling, compacting of fills and rough grading required to bring entire project area to subgrade as shown on the drawing.
    - The tolerance for paved areas shall not exceed 0.05 feet above established subgrade. All other areas shall not exceed 0.05 feet plus or minus the established grade. Provide roundings at top and bottom of banks and other breaks in grade.
    - The Engineer shall be notified when the Contractor has reached the tolerance as stated above, so that field measurements and spot elevations can be verified by the Engineer. The Contractor shall not remove his equipment from the site until the Engineer has verified that the job meets the above tolerance.

**LEGEND**

- 870- EXISTING CONTOUR
- S- EXISTING SANITARY SEWER
- S- EXISTING STORM SEWER
- 848.0- PROPOSED GRADE
- 870- PROPOSED CONTOUR
- S- PROPOSED SANITARY SEWER
- S- PROPOSED STORM SEWER
- W- PROPOSED WATER LINE
- \*\*\*- PROPOSED SWALE
- S- PROPOSED 5' SIDEWALK (BY HOME BUILDER)  
 (DEVELOPER SHALL INSTALL SIDEWALKS ALONG ALL COMMON AREAS)

**REAR**  
 MFPG=XXX.X  
 XX  
 XXX.X  
 MFPG=XXX.X

Denotes REAR PROTECTION GRADES  
 LOT NUMBER  
 PAD ELEVATION  
 Denotes FRONT PROTECTION GRADES

**FRONT R/W**

MFF=XXX.X  
 MIN. FINISH FLOOR ELEV. IS BASED OFF OF THE BELOW CRITERIA, WHICHEVER IS HIGHER:  
 1. (1) FOOT ABOVE THE NEAREST UPSTREAM OR DOWNSTREAM SANITARY MANHOLE WHICH EVER IS LOWEST.  
 2. 15" (1.25') ABOVE THE ROAD ELEVATION  
 3. 6" (0.5') ABOVE THE M.L.A.G

MFPG=XXX.X MINIMUM FLOOD PROTECTION GRADE  
 MLAG=XXX.X MINIMUM LOWEST ADJACENT GRADE

4" SSD TO LOT RISER TC  
 DUAL WALL, HANCOR HI-Q TYPE 4 SSD (SIZE NOTED ON PLANS)  
 CONSTRUCTION LIMITS

- - - (FFF) - - - APPROXIMATE LIMITS OF FLOODPLAIN  
 - - - (FWF) - - - APPROXIMATE LIMITS OF FLOODWAY  
 BOTH PER THE WILLIAMS CREEK HYDRAULIC ANALYSIS PERFORMED BY CHRISTOPHER B. BURKE ENGINEERING, Ltd. PROJECT #07-760

**DRAINAGE SUMMARY**  
 REFERENCE SHEET C204 FOR DRAINAGE SUMMARY INFORMATION.

**FLOOD STATEMENT**  
 THIS SITE DOES LIE WITHIN A FLOODWAY OR FLOOD PLAIN PER THE WILLIAMS CREEK HYDRAULIC ANALYSIS PERFORMED BY CHRISTOPHER B. BURKE ENGINEERING, Ltd. PROJECT #07-760

**VEGETATIVE COVER**  
 EXISTING SITE CONSIST MOSTLY OF GRASS AND WEEDS WITH WOODS ON THE SITE.

**ADJACENT PROPERTIES**  
 NORTH: AGRICULTURE  
 EAST: AGRICULTURE  
 SOUTH: AGRICULTURE  
 WEST: RESIDENTIAL



**811**  
 Know what's below.  
 Call before you dig.

DATE	MARK	REVISIONS
04/07/16	ASBUILT	
10/20/15	REVISED BMP LAYOUT PER CLIENT REQUEST	
04/06/15	REVISED P/W ON JACKSON'S GRANT BLVD	
03/26/15	ADDED CONTOUR LABELS	
11/23/14	REVISED PER COMMENTS	
10/07/14	REVISED PER TAC COMMENTS	
07/25/14	REVISED PER TAC COMMENTS	



CERTIFIED: 03/21/14  
*David J. Stoppelwerth*

**STOEPPELWERTH**  
 ALWAYS ON  
 7905 East 106th Street, Fishers, IN 46038-2505  
 phone: 317.849.5955 fax: 317.849.5942

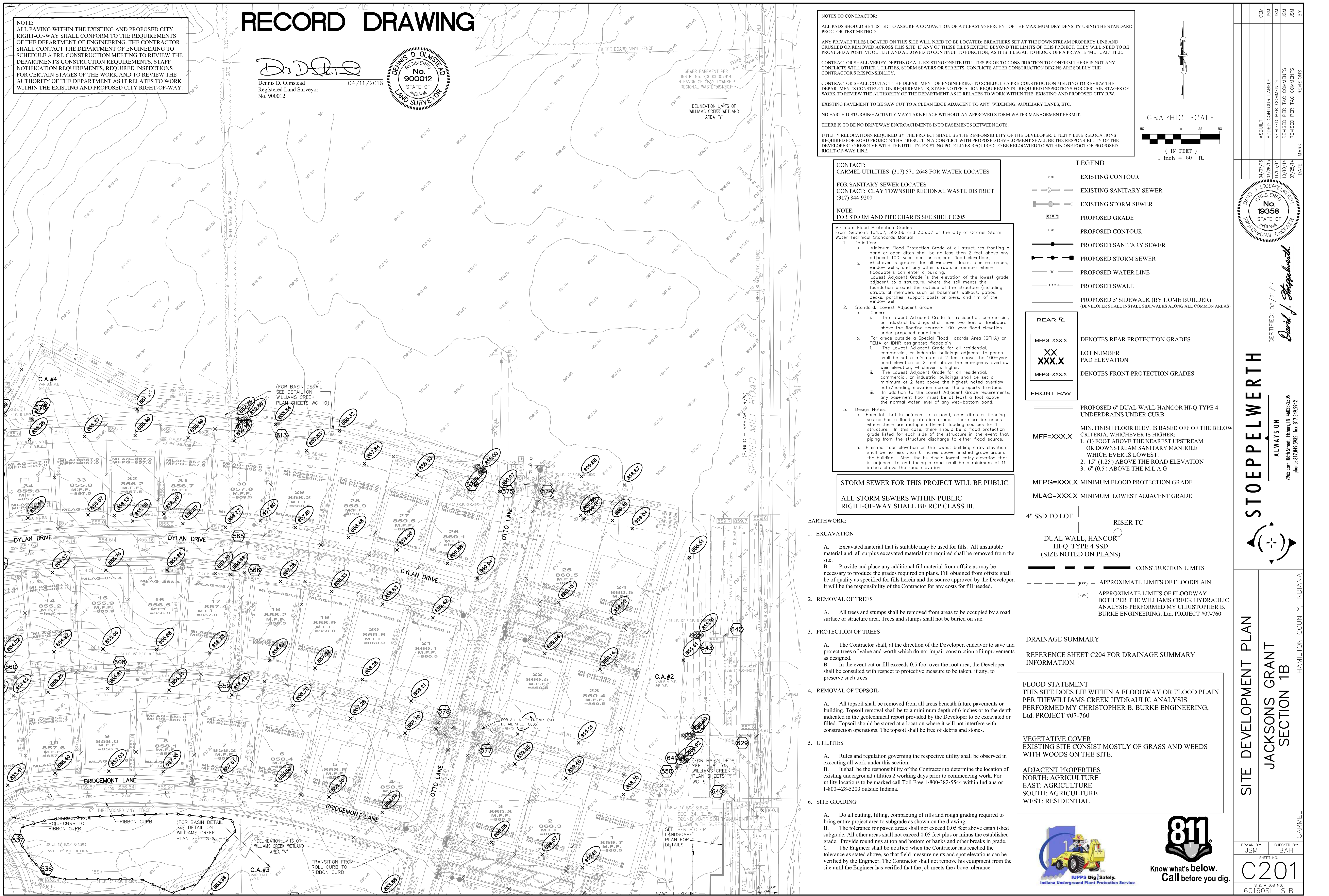
**SITE DEVELOPMENT PLAN**  
**JACKSONS GRANT SECTION 1B**  
 HAMILTON COUNTY, INDIANA

DRAWN BY: JSM  
 CHECKED BY: BAH  
 SHEET NO. **C200**  
 5 & 4 JOB NO. 60160SIL-51B

# RECORD DRAWING

NOTE:  
ALL PAVING WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF ENGINEERING. THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF ENGINEERING TO SCHEDULE A PRE-CONSTRUCTION MEETING TO REVIEW THE DEPARTMENT'S CONSTRUCTION REQUIREMENTS, STAFF NOTIFICATION REQUIREMENTS, REQUIRED INSPECTIONS FOR CERTAIN STAGES OF THE WORK AND TO REVIEW THE AUTHORITY OF THE DEPARTMENT AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY.

Dennis D. Olmstead  
Registered Land Surveyor  
No. 900012



**NOTES TO CONTRACTOR:**

ALL PADS SHOULD BE TESTED TO ASSURE A COMPACTION OF AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY USING THE STANDARD PROCTOR TEST METHOD.

ANY PRIVATE TILES LOCATED ON THIS SITE WILL NEED TO BE LOCATED, BREATHERS SET AT THE DOWNSTREAM PROPERTY LINE AND CRUSHED OR REMOVED ACROSS THIS SITE. IF ANY OF THESE TILES EXTEND BEYOND THE LIMITS OF THIS PROJECT, THEY WILL NEED TO BE PROVIDED A POSITIVE OUTLET AND ALLOWED TO CONTINUE TO FUNCTION, AS IT IS ILLEGAL TO BLOCK OFF A PRIVATE "MUTUAL" TILE.

CONTRACTOR SHALL VERIFY DEPTHS OF ALL EXISTING ON-SITE UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM THERE IS NOT ANY CONFLICTS WITH OTHER UTILITIES, STORM SEWERS OR STREETS. CONFLICTS AFTER CONSTRUCTION BEGINS ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY.

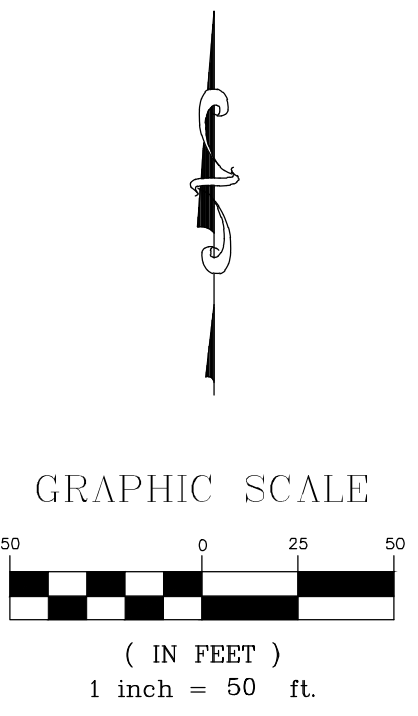
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EXISTING PAVEMENT TO BE SAW CUT TO A CLEAN EDGE ADJACENT TO ANY WIDENING, AUXILIARY LANES, ETC.

NO EARTH DISTURBING ACTIVITY MAY TAKE PLACE WITHOUT AN APPROVED STORM WATER MANAGEMENT PERMIT.

THERE IS TO BE NO DRIVEWAY ENCROACHMENTS INTO EASEMENTS BETWEEN LOTS.

UTILITY RELOCATIONS REQUIRED BY THE PROJECT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. UTILITY LINE RELOCATIONS REQUIRED FOR ROAD PROJECTS THAT RESULT IN A CONFLICT WITH PROPOSED DEVELOPMENT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO RESOLVE WITH THE UTILITY. EXISTING POLE LINES REQUIRED TO BE RELOCATED TO WITHIN ONE FOOT OF PROPOSED RIGHT-OF-WAY LINE.



**CONTACT:**  
CARMEL UTILITIES (317) 571-2648 FOR WATER LOCATES

**FOR SANITARY SEWER LOCATES**  
**CONTACT:** CLAY TOWNSHIP REGIONAL WASTE DISTRICT (317) 844-9200

**NOTE:**  
**FOR STORM AND PIPE CHARTS SEE SHEET C205**

**Minimum Flood Protection Grades**  
From Sections 104.02, 302.06 and 303.07 of the City of Carmel Storm Water Technical Standards Manual

**1. Definitions**

a. Minimum Flood Protection Grade of all structures fronting a pond or open ditch shall be no less than 2 feet above any adjacent 100-year local or regional flood elevations, whichever is greater, for all windows, doors, pipe entrances, window wells, and any other structure member where floodwaters can enter a building. Lowest Adjacent Grade is the elevation of the lowest grade adjacent to a structure, where the soil meets the foundation around the outside of the structure (including structural members such as basement walkout, patios, decks, porches, support posts or piers, and rim of the window well).

b. Standard: Lowest Adjacent Grade

a. General

i. The Lowest Adjacent Grade for residential, commercial, or industrial buildings shall have two feet of freeboard above the flooding source's 100-year flood elevation under proposed conditions.

ii. For areas outside a Special Flood Hazards Area (SFHA) or FEMA or IDNR designated floodplain

i. The Lowest Adjacent Grade for all residential, commercial, or industrial buildings adjacent to ponds shall be set a minimum of 2 feet above the 100-year pond elevation or 2 feet above the emergency overflow weir elevation, whichever is higher.

ii. The Lowest Adjacent Grade for all residential, commercial, or industrial buildings shall be set a minimum of 2 feet above the highest noted overflow path/ponding elevation across the property frontage.

iii. In addition to the Lowest Adjacent Grade requirements, any basement floor must be at least a foot above the normal water level of any wet-bottom pond.

**3. Design Notes:**

a. Each lot that is adjacent to a pond, open ditch or flooding source has a flood protection grade. There are instances where there are multiple different flooding sources for 1 structure. In this case, there should be a flood protection grade listed for each side of the structure in the event that piping from the structure discharges to either flood source.

b. Finished floor elevation or the lowest building entry elevation shall be no less than 6 inches above finished grade around the building. Also, the building's lowest entry elevation that is adjacent to and facing a road shall be a minimum of 15 inches above the road elevation.

**STORM SEWER FOR THIS PROJECT WILL BE PUBLIC.**

**ALL STORM SEWERS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE RCP CLASS III.**

- LEGEND**
- 870 --- EXISTING CONTOUR
  - 870 --- EXISTING SANITARY SEWER
  - 870 --- EXISTING STORM SEWER
  - 848.0 PROPOSED GRADE
  - 870 --- PROPOSED CONTOUR
  - 870 --- PROPOSED SANITARY SEWER
  - 870 --- PROPOSED STORM SEWER
  - W --- PROPOSED WATER LINE
  - --- PROPOSED SWALE
  - --- PROPOSED 5' SIDEWALK (BY HOME BUILDER) (DEVELOPER SHALL INSTALL SIDEWALKS ALONG ALL COMMON AREAS)

- REAR RW**
- MFPG=XXX.X DENOTES REAR PROTECTION GRADES
- XX XXX.X LOT NUMBER PAD ELEVATION
- MFPG=XXX.X DENOTES FRONT PROTECTION GRADES
- FRONT RW**

- PROPOSED 6" DUAL WALL HANCOR HI-Q TYPE 4 UNDERDRAINS UNDER CURB.
- MIN. FINISH FLOOR ELEV. IS BASED OFF OF THE BELOW CRITERIA, WHICHEVER IS HIGHER:
1. (1) FOOT ABOVE THE NEAREST UPSTREAM OR DOWNSTREAM SANITARY MANHOLE WHICH EVER IS LOWEST.
  2. 15" (1.25') ABOVE THE ROAD ELEVATION
  3. 6" (0.5') ABOVE THE M.L.A.G

- MFPG=XXX.X MINIMUM FLOOD PROTECTION GRADE
- MLAG=XXX.X MINIMUM LOWEST ADJACENT GRADE
- 4" SSD TO LOT RISER TC
- DUAL WALL, HANCOR HI-Q TYPE 4 SSD (SIZE NOTED ON PLANS)
- CONSTRUCTION LIMITS

- (FFF) --- APPROXIMATE LIMITS OF FLOODPLAIN
- (FWF) --- APPROXIMATE LIMITS OF FLOODWAY BOTH PER THE WILLIAMS CREEK HYDRAULIC ANALYSIS PERFORMED BY CHRISTOPHER B. BURKE ENGINEERING, Ltd. PROJECT #07-760

**DRAINAGE SUMMARY**

REFERENCE SHEET C204 FOR DRAINAGE SUMMARY INFORMATION.

**FLOOD STATEMENT**

THIS SITE DOES LIE WITHIN A FLOODWAY OR FLOOD PLAIN PER THE WILLIAMS CREEK HYDRAULIC ANALYSIS PERFORMED BY CHRISTOPHER B. BURKE ENGINEERING, Ltd. PROJECT #07-760

**VEGETATIVE COVER**

EXISTING SITE CONSIST MOSTLY OF GRASS AND WEEDS WITH WOODS ON THE SITE.

**ADJACENT PROPERTIES**

NORTH: AGRICULTURE  
EAST: AGRICULTURE  
SOUTH: AGRICULTURE  
WEST: RESIDENTIAL

- EARTHWORK:**
- 1. EXCAVATION**
    - A. Excavated material that is suitable may be used for fills. All unsuitable material and all surplus excavated material not required shall be removed from the site.
    - B. Provide and place any additional fill material from offsite as may be necessary to produce the grades required on plans. Fill obtained from offsite shall be of quality as specified for fills herein and the source approved by the Developer. It will be the responsibility of the Contractor for any costs for fill needed.
  - 2. REMOVAL OF TREES**
    - A. All trees and stumps shall be removed from areas to be occupied by a road surface or structure area. Trees and stumps shall not be buried on site.
  - 3. PROTECTION OF TREES**
    - A. The Contractor shall, at the direction of the Developer, endeavor to save and protect trees of value and worth which do not impair construction of improvements as designed.
    - B. In the event cut or fill exceeds 0.5 foot over the root area, the Developer shall be consulted with respect to protective measure to be taken, if any, to preserve such trees.
  - 4. REMOVAL OF TOPSOIL**
    - A. All topsoil shall be removed from all areas beneath future pavements or building. Topsoil removal shall be to a minimum depth of 6 inches or to the depth indicated in the geotechnical report provided by the Developer to be excavated or filled. Topsoil shall be stored at a location where it will not interfere with construction operations. The topsoil shall be free of debris and stones.
  - 5. UTILITIES**
    - A. Rules and regulation governing the respective utility shall be observed in executing all work under this section.
    - B. It shall be the responsibility of the Contractor to determine the location of existing underground utilities 2 working days prior to commencing work. For utility locations to be marked call Toll Free 1-800-382-5544 within Indiana or 1-800-428-5200 outside Indiana.
  - 6. SITE GRADING**
    - A. Do all cutting, filling, compacting of fills and rough grading required to bring entire project area to subgrade as shown on the drawing.
    - B. The tolerance for paved areas shall not exceed 0.05 feet above established subgrade. All other areas shall not exceed 0.05 feet plus or minus the established grade. Provide roundings at top and bottom of banks and other breaks in grade.
    - C. The Engineer shall be notified when the Contractor has reached the tolerance as stated above, so that field measurements and spot elevations can be verified by the Engineer. The Contractor shall not remove his equipment from the site until the Engineer has verified that the job meets the above tolerance.



**811**

Know what's below.  
Call before you dig.

**STOEPPELWERTH**

**JACKSONS GRANT SECTION 1B**

**SITE DEVELOPMENT PLAN**

ASBUILT 04/07/16  
ADDED CONTOUR LABELS 03/29/15  
REVISED PER COMMENTS 11/03/14  
REVISED PER TAC COMMENTS 10/07/14  
REVISED PER TAC COMMENTS 07/25/14

**REGISTERED PROFESSIONAL ENGINEER**  
No. 19358  
STATE OF INDIANA

CERTIFIED: 03/21/14  
David J. Stoppelwerth

7905 East 106th Street, Fishers, IN 46038-2505  
phone: 317.849.5925 fax: 317.849.5942

ALWAYS ON

HAMILTON COUNTY, INDIANA

CARMEL

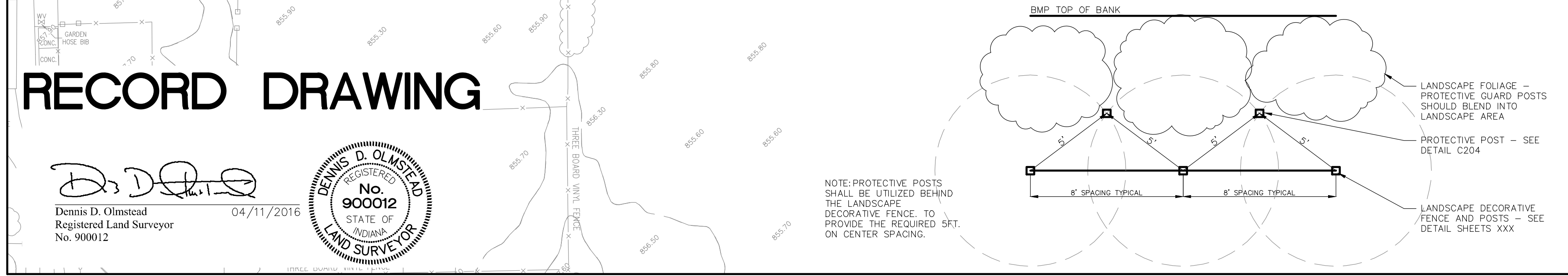
DRAWN BY: JSM  
CHECKED BY: BAH

SHEET NO. **C201**

5 B 4 JOB NO. 60160SIL-51B

File Name: S:\60160SIL-51B\DWG\C201\_Site Development Plans.dwg - C201  
Modified / By: March 14, 2019 10:28:35 AM / kmitchell  
Plotted / By: March 14, 2019 10:30:43 AM / Kenny Mitchell

S:\60160SIL-S\BID\WG\200\_Site Development Plans.dwg - C202  
 March 14, 2019 10:28:35 AM / kmitchell  
 March 14, 2019 10:31:08 AM / Kenny Mitchell



**NOTES TO CONTRACTOR:**  
 ALL PADS SHOULD BE TESTED TO ASSURE A COMPACTION OF AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY USING THE STANDARD PROCTOR TEST METHOD.  
 ANY PRIVATE TILES LOCATED ON THIS SITE WILL NEED TO BE LOCATED, BREATHERS SET AT THE DOWNSTREAM PROPERTY LINE AND CRUSHED OR REMOVED ACROSS THIS SITE, IF ANY OF THESE TILES EXTEND BEYOND THE LIMITS OF THIS PROJECT, THEY WILL NEED TO BE PROVIDED A POSITIVE OUTLET AND ALLOWED TO CONTINUE TO FUNCTION, AS IT IS ILLEGAL TO BLOCK OFF A PRIVATE "MUTUAL" TILE.  
 CONTRACTOR SHALL VERIFY DEPTHS OF ALL EXISTING ON-SITE UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM THERE IS NOT ANY CONFLICTS WITH OTHER UTILITIES, STORM SEWERS OR STREETS. CONFLICTS AFTER CONSTRUCTION BEGINS ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY.  
 CONTRACTOR SHALL CONTACT THE DEPARTMENT OF ENGINEERING TO SCHEDULE A PRE-CONSTRUCTION MEETING TO REVIEW THE DEPARTMENT'S CONSTRUCTION REQUIREMENTS, STAFF NOTIFICATION REQUIREMENTS, REQUIRED INSPECTIONS FOR CERTAIN STAGES OF WORK TO REVIEW THE AUTHORITY OF THE DEPARTMENT AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED CITY R.W.  
 EXISTING PAVEMENT TO BE SAW CUT TO A CLEAN EDGE ADJACENT TO ANY WIDENING, AUXILIARY LANES, ETC.  
 NO EARTH DISTURBING ACTIVITY MAY TAKE PLACE WITHOUT AN APPROVED STORM WATER MANAGEMENT PERMIT.  
 THERE IS TO BE NO DRIVEWAY ENCRoACHMENTS INTO EASEMENTS BETWEEN LOTS.  
 UTILITY RELOCATIONS REQUIRED BY THE PROJECT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. UTILITY LINE RELOCATIONS REQUIRED FOR ROAD PROJECTS THAT RESULT IN A CONFLICT WITH PROPOSED DEVELOPMENT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO RESOLVE WITH THE UTILITY. EXISTING POLE LINES REQUIRED TO BE RELOCATED TO WITHIN ONE FOOT OF PROPOSED RIGHT-OF-WAY LINE.

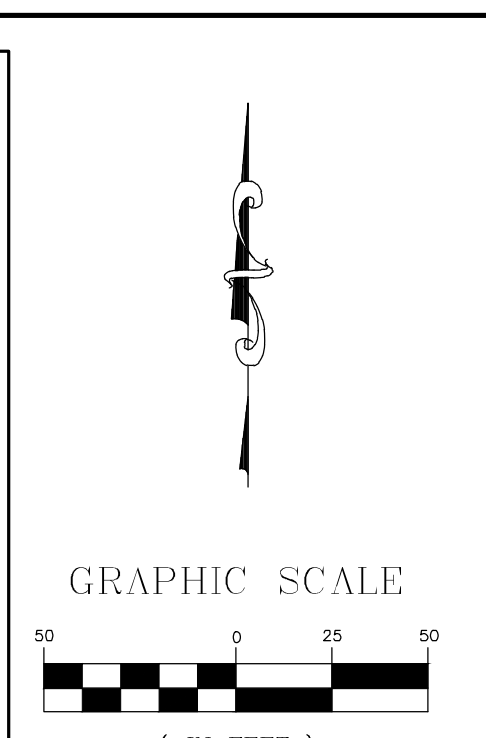
**CONTACT:**  
 CARMEL UTILITIES (317) 571-2648 FOR WATER LOCATES  
 FOR SANITARY SEWER LOCATES  
 CONTACT: CLAY TOWNSHIP REGIONAL WASTE DISTRICT (317) 844-9200  
**NOTE:**  
 FOR STORM AND PIPE CHARTS SEE SHEET C205

**Minimum Flood Protection Grades**  
 From Sections 104.02, 302.06 and 303.07 of the City of Carmel Storm Water Technical Standards Manual

- Definitions
  - Minimum Flood Protection Grade of all structures fronting a pond or open ditch shall be no less than 2 feet above any adjacent 100-year local or regional flood elevations, whichever is greater, for all windows, doors, pipe entrances, window wells, and any other structure member where floodwaters can enter a building. Lowest Adjacent Grade is the elevation of the lowest grade adjacent to a structure, where the soil meets the foundation around the outside of the structure (including structural members such as basement walkout, patios, decks, porches, support posts or piers, and rim of the window well).
  - Standard: Lowest Adjacent Grade
    - The Lowest Adjacent Grade for residential, commercial, or industrial buildings shall have two feet of freeboard above the flooding source's 100-year flood elevation under proposed conditions.
    - For areas outside a Special Flood Hazard Area (SFHA) or FEMA or IDNR designated floodplain
      - The Lowest Adjacent Grade for all residential, commercial, or industrial buildings adjacent to ponds shall be set a minimum of 2 feet above the emergency overflow weir elevation, whichever is higher.
      - The Lowest Adjacent Grade for all residential, commercial, or industrial buildings shall be set a minimum of 2 feet above the highest noted overflow path/ponding elevation across the property frontage.
      - In addition to the Lowest Adjacent Grade requirements, any basement floor must be at least a foot above the normal water level of any wet-bottom pond.
- Design Notes:
  - Each lot that is adjacent to a pond, open ditch or flooding source has a flood protection grade. There are instances where there are multiple different flooding sources for 1 structure. In this case, there should be a flood protection grade listed for each side of the structure in the event that piping from the structure discharges to either flood source.
  - Finished floor elevation or the lowest building entry elevation shall be no less than 6 inches above finished grade around the building. Also, the building's lowest entry elevation that is adjacent to and facing a road shall be a minimum of 15 inches above the road elevation.

**STORM SEWER FOR THIS PROJECT WILL BE PUBLIC.**  
**ALL STORM SEWERS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE RCP CLASS III.**

- EARTHWORK:**
- EXCAVATION**
    - Excavated material that is suitable may be used for fills. All unsuitable material and all surplus excavated material not required shall be removed from the site.
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  - REMOVAL OF TREES**
    - All trees and stumps shall be removed from areas to be occupied by a road surface or structure area. Trees and stumps shall not be buried on site.
  - PROTECTION OF TREES**
    - The Contractor shall, at the direction of the Developer, endeavor to save and protect trees of value and worth which do not impair construction of improvements as designed.
    - In the event cut or fill exceeds 0.5 foot over the road area, the Developer shall be consulted with respect to protective measure to be taken, if any, to preserve such trees.
  - REMOVAL OF TOPSOIL**
    - All topsoil shall be removed from all areas beneath future pavements or building. Topsoil removal shall be to a minimum depth of 6 inches or to the depth indicated in the geotechnical report provided by the Developer to be excavated or filled. Topsoil should be stored at a location where it will not interfere with construction operations. The topsoil shall be free of debris and stones.
  - UTILITIES**
    - Rules and regulation governing the respective utility shall be observed in executing all work under this section.
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  - SITE GRADING**
    - Do all cutting, filling, compacting of fills and rough grading required to bring entire project area to subgrade as shown on the drawing.
    - The tolerance for paved areas shall not exceed 0.05 feet above established subgrade. All other areas shall not exceed 0.05 feet plus or minus the established grade. Provide roundings at top and bottom of banks and other breaks in grade.
    - The Engineer shall be notified when the Contractor has reached the tolerance as stated above, so that field measurements and spot elevations can be verified by the Engineer. The Contractor shall not remove his equipment from the site until the Engineer has verified that the job meets the above tolerance.



- LEGEND**
- 870 --- EXISTING CONTOUR
  - 870 --- EXISTING SANITARY SEWER
  - 870 --- EXISTING STORM SEWER
  - 870 --- PROPOSED GRADE
  - 870 --- PROPOSED CONTOUR
  - 870 --- PROPOSED SANITARY SEWER
  - 870 --- PROPOSED STORM SEWER
  - 870 --- PROPOSED WATER LINE
  - 870 --- PROPOSED SIDEWALK
  - 870 --- PROPOSED 5' SIDEWALK (BY HOME BUILDER) (DEVELOPER SHALL INSTALL SIDEWALKS ALONG ALL COMMON AREAS)

**REAR R/W**  
 MFPG=XXX.X  
 XX  
 XXX.X  
 MFPG=XXX.X  
**FRONT R/W**

--- MFPG=XXX.X --- DENOTES REAR PROTECTION GRADES  
 --- MFPG=XXX.X --- DENOTES FRONT PROTECTION GRADES

--- MFF=XXX.X --- PROPOSED 6" DUAL WALL HANCOR HI-Q TYPE 4 UNDERDRAINS UNDER CURB.  
 --- MFF=XXX.X --- MIN. FINISH FLOOR ELEV. IS BASED OFF OF THE BELOW CRITERIA, WHICHEVER IS HIGHER:  
 1. (1) FOOT ABOVE THE NEAREST UPSTREAM OR DOWNSTREAM SANITARY MANHOLE WHICH EVER IS LOWEST.  
 2. 15" (1.25') ABOVE THE ROAD ELEVATION  
 3. 6" (0.5') ABOVE THE M.L.A.G

--- 4" SSD TO LOT ---  
 --- RISER TC ---  
 --- DUAL WALL, HANCOR HI-Q TYPE 4 SSD (SIZE NOTED ON PLANS) ---  
 --- CONSTRUCTION LIMITS ---  
 --- (FFF) --- APPROXIMATE LIMITS OF FLOODPLAIN  
 --- (FWF) --- APPROXIMATE LIMITS OF FLOODWAY BOTH PER THE WILLIAMS CREEK HYDRAULIC ANALYSIS PERFORMED BY CHRISTOPHER B. BURKE ENGINEERING, Ltd. PROJECT #07-760

**DRAINAGE SUMMARY**  
 REFERENCE SHEET C204 FOR DRAINAGE SUMMARY INFORMATION.

**FLOOD STATEMENT**  
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**VEGETATIVE COVER**  
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**ADJACENT PROPERTIES**  
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 EAST: AGRICULTURE  
 SOUTH: AGRICULTURE  
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**811**  
 Know what's below. Call before you dig.  
 IUPPS Dig Safety.  
 Indiana Underground Plant Protection Service

**STOEPPELWERTH**  
 ALWAYS ON  
 7905 East 106th Street, Fishers, IN 46038-2505  
 phone: 317.849.5955 fax: 317.849.5942

**SITE DEVELOPMENT PLAN**  
**JACKSONS GRANT SECTION 1B**  
 HAMILTON COUNTY, INDIANA  
 CARMEL

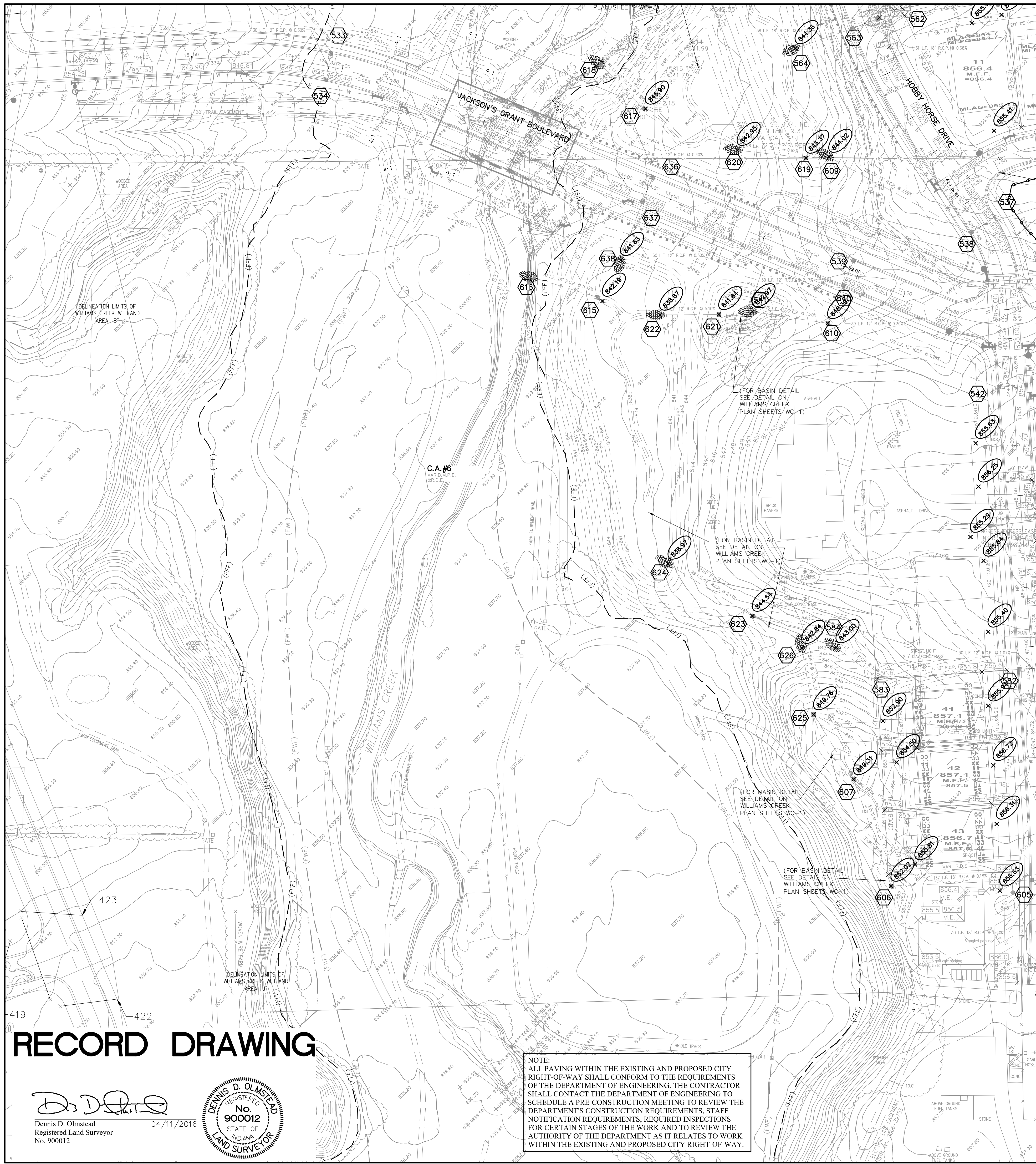
**REGISTERED PROFESSIONAL ENGINEER**  
 No. 19358  
 STATE OF INDIANA  
 David J. Stoppelwerth  
 CERTIFIED: 03/21/14

**DRAWN BY:** JSM  
**CHECKED BY:** BAH  
**SHEET NO.:** C202  
 5 & 4 JOB NO. 60160SIL-51B

**RECORD DRAWING**

Dennis D. Olmstead  
 Registered Land Surveyor  
 No. 900012  
 04/11/2016

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 March 14, 2019 10:28:35 AM / kmitchell  
 March 14, 2019 10:31:33 AM / Kenny Mitchell



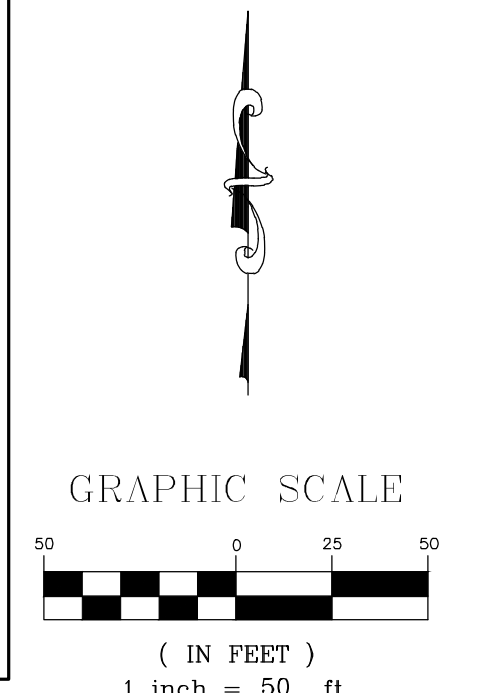
# RECORD DRAWING

**Dennis D. Olmstead**  
 Registered Land Surveyor  
 No. 900012  
 04/11/2016



**NOTE:**  
 ALL PAVING WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF ENGINEERING. THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF ENGINEERING TO SCHEDULE A PRE-CONSTRUCTION MEETING TO REVIEW THE DEPARTMENT'S CONSTRUCTION REQUIREMENTS, STAFF NOTIFICATION REQUIREMENTS, REQUIRED INSPECTIONS FOR CERTAIN STAGES OF THE WORK AND TO REVIEW THE AUTHORITY OF THE DEPARTMENT AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY.

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 FOR SANITARY SEWER LOCATES  
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**LEGEND**

- 670 --- EXISTING CONTOUR
- 670 --- EXISTING SANITARY SEWER
- 670 --- EXISTING STORM SEWER
- 670 --- PROPOSED GRADE
- 670 --- PROPOSED CONTOUR
- 670 --- PROPOSED SANITARY SEWER
- 670 --- PROPOSED STORM SEWER
- 670 --- PROPOSED WATER LINE
- 670 --- PROPOSED SWALE
- 670 --- PROPOSED 5' SIDEWALK (BY HOME BUILDER)  
 (DEVELOPER SHALL INSTALL SIDEWALKS ALONG ALL COMMON AREAS)

**REAR RW**  
 MFPG=XXX.X  
 XX  
 XXX.X  
 MFPG=XXX.X  
**FRONT RAW**

NOTES REAR PROTECTION GRADES  
 LOT NUMBER  
 PAD ELEVATION  
 DENOTES FRONT PROTECTION GRADES

MIN. FINISH FLOOR ELEV. IS BASED OFF OF THE BELOW CRITERIA, WHICHEVER IS HIGHER:  
 1. (1) FOOT ABOVE THE NEAREST UPSTREAM OR DOWNSTREAM SANITARY MANHOLE WHICH EVER IS LOWEST.  
 2. 15" (1.25') ABOVE THE ROAD ELEVATION  
 3. 6" (0.5') ABOVE THE M.L.A.G

MFPG=XXX.X MINIMUM FLOOD PROTECTION GRADE  
 MLAG=XXX.X MINIMUM LOWEST ADJACENT GRADE

4" SSD TO LOT  
 RISER TC  
 DUAL WALL, HANCOR HI-Q TYPE 4 SSD (SIZE NOTED ON PLANS)  
 CONSTRUCTION LIMITS

--- (FFF) --- APPROXIMATE LIMITS OF FLOODPLAIN  
 --- (FWF) --- APPROXIMATE LIMITS OF FLOODWAY BOTH PER THE WILLIAMS CREEK HYDRAULIC ANALYSIS PERFORMED BY CHRISTOPHER B. BURKE ENGINEERING, Ltd. PROJECT #07-760

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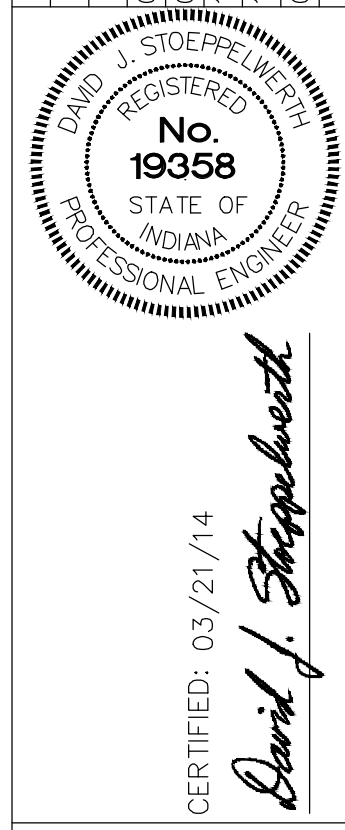
**VEGETATIVE COVER**  
 EXISTING SITE CONSIST MOSTLY OF GRASS AND WEEDS WITH WOODS ON THE SITE.

**ADJACENT PROPERTIES**  
 NORTH: AGRICULTURE  
 EAST: AGRICULTURE  
 SOUTH: AGRICULTURE  
 WEST: RESIDENTIAL

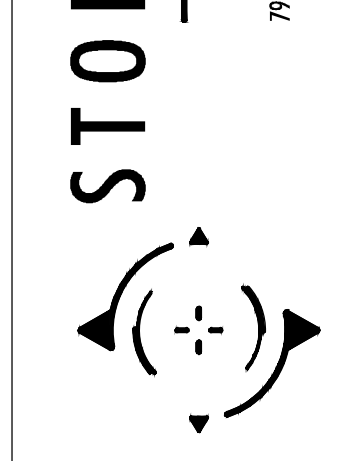


**811**  
 Know what's below. Call before you dig.

ASBUILT	04/07/16	DATE
ADDED CONTOUR LABELS	03/09/15	DATE
REVISED PER COMMENTS	07/02/14	DATE
REVISED PER TAC COMMENTS	07/02/14	DATE
REVISED PER TAC COMMENTS	07/25/14	DATE
REVISIONS		BY

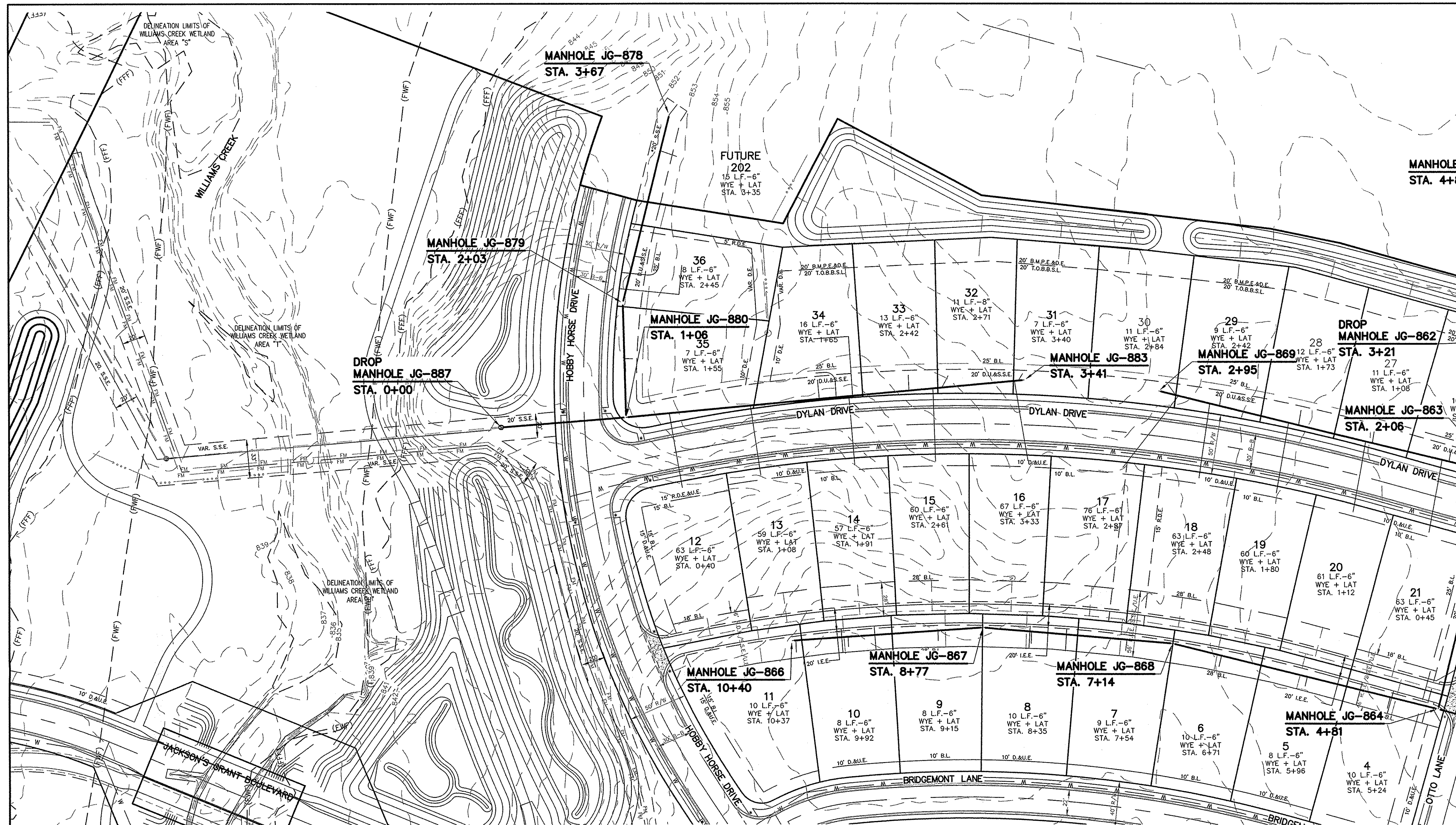


**STOEPPELWERTH**  
 ALWAYS ON  
 7905 East 106th Street, Fishers, IN 46038-2505  
 phone: 317.849.5955 fax: 317.849.5942

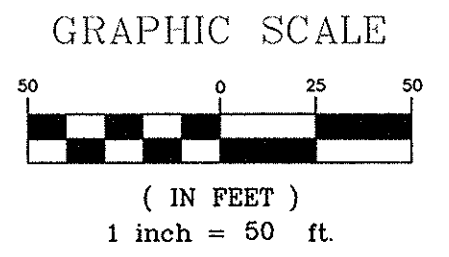


**SITE DEVELOPMENT PLAN**  
**JACKSONS GRANT SECTION 1B**  
 HAMILTON COUNTY, INDIANA

DRAWN BY: JSM  
 CHECKED BY: BAH  
 SHEET NO. C203  
 5 & 4 JOB NO. 60160SIL-51B



FULL DEPTH GRANULAR BACKFILL (SEE SHEET C800 FOR WATER & SANITARY SEWER TRENCH DETAIL)



NO EARTH DISTURBING ACTIVITIES MAY TAKE PLACE WITHOUT AN APPROVED STORM WATER MANAGEMENT PERMIT.

MIN. SLOPES PER THE TEN STATE STANDARDS SHALL PREVAIL IN ALL CASES.

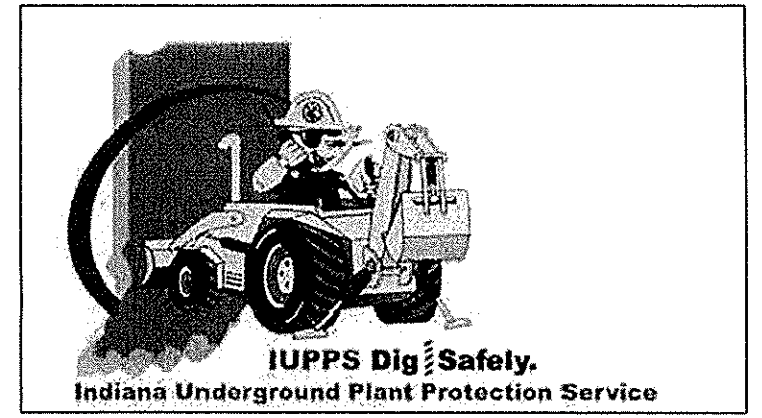
THE EXTERIORS OF ALL MANHOLES NEED TO BE COATED PER CLAY TOWNSHIP REGIONAL WASTE STANDARDS.

THERE ARE TO BE NO WATER VALVES OR MANHOLES WITHIN THE PAVEMENT, CURB, OR SIDEWALK WITH THE EXCEPTION OF CURB INLETS.

INSTALL A TRACER WIRE WITH ALL MAINS AND SERVICE CONNECTIONS.

THE MINIMUM COVER FROM THE TOP OF THE INSTALLED PAVEMENT TO THE TOP OF THE INSTALLED PIPE SHALL BE THE PAVEMENT SECTION THICKNESS (ALL BITUMINOUS AND AGGREGATE MATERIAL ABOVE THE SUBGRADE) PLUS 1'-0", BUT UNDER NO CIRCUMSTANCES SHALL THE COVER ALONG ANY PART OF THE PIPE FROM THE FINAL PAVEMENT ELEVATION TO THE TOP OF THE PIPE BE LESS THAN 2.5 FEET.

NOTE: ALL FINAL STRUCTURE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE TENTH (0.1') OF A FOOT OF DESIGN GRADE, AND ARE TO BE ESTABLISHED UTILIZING 1-4" RISER RING, NO MORE NO LESS, ON EACH STRUCTURE.



**811**  
Know what's below.  
Call before you dig.

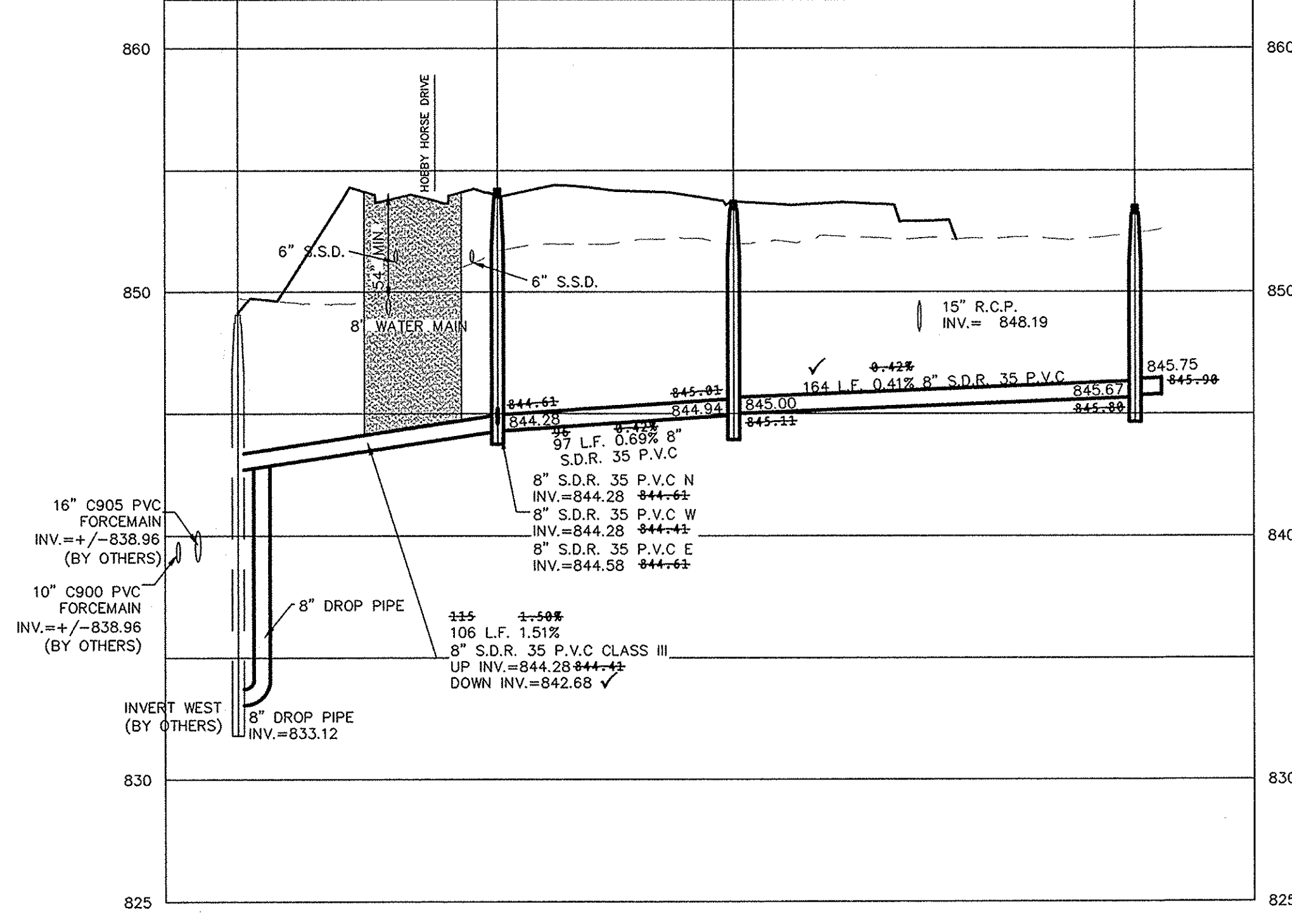
# RECORD DRAWING

NOTE: SANITARY LATERALS ARE ASBUILT STATIONING AND LENGTHS.

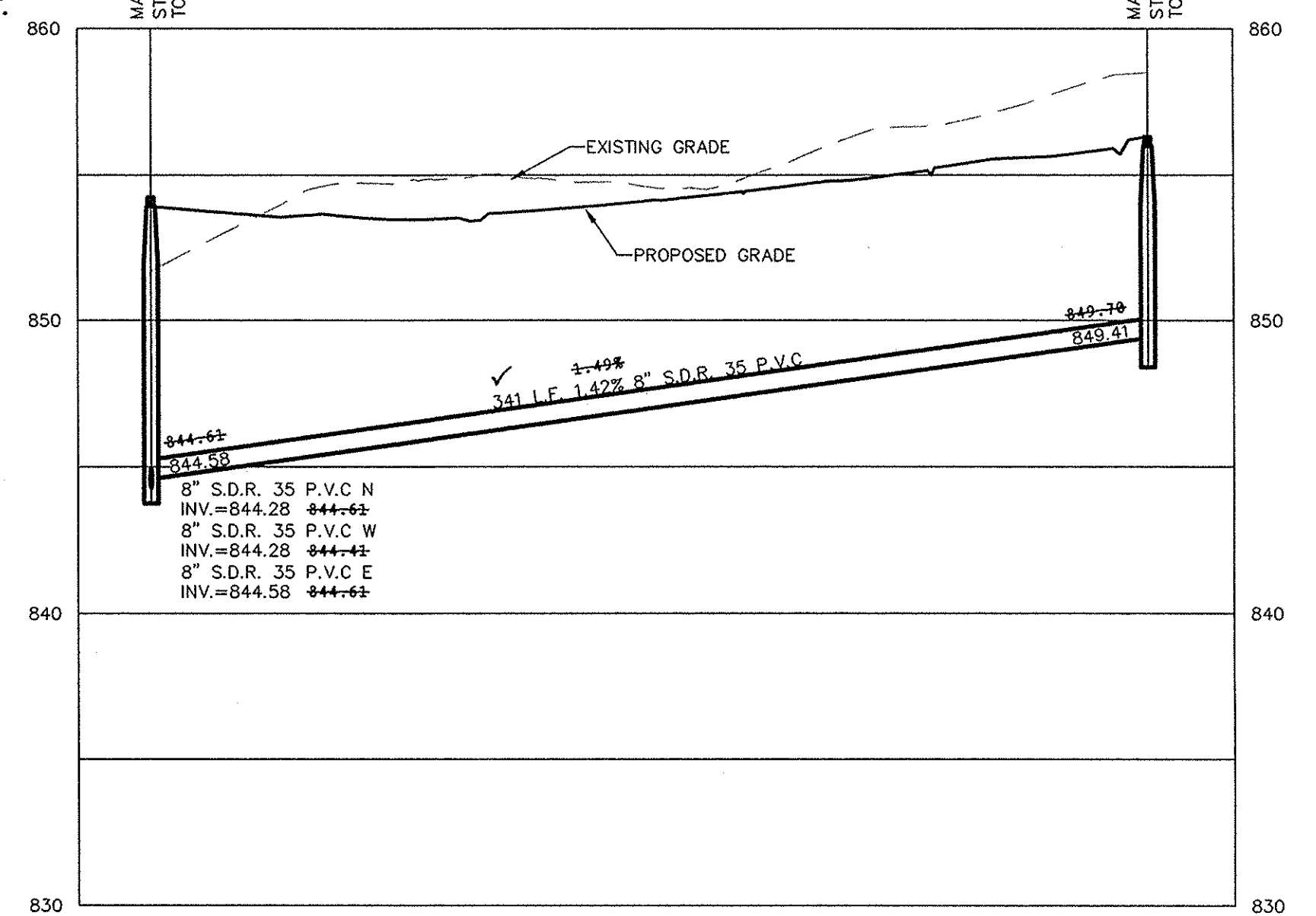
Dennis D. Olmstead  
Registered Land Surveyor  
No. 900012  
04/11/2016



SCALE: 1"=50' HOR.  
1"=5' VERT.



SCALE: 1"=50' HOR.  
1"=5' VERT.



This information was gathered for input into the Hamilton County Geographic Information System and is not to be used as an official record of the CS. Entry Date: 2017 Entered By: SJM

DATE	REVISIONS	BY
07/25/14	REVISED PER TAC COMMENTS	JSM
10/10/14	REVISED PER TAC COMMENTS	JSM
04/07/16	ASBUILT	JSM

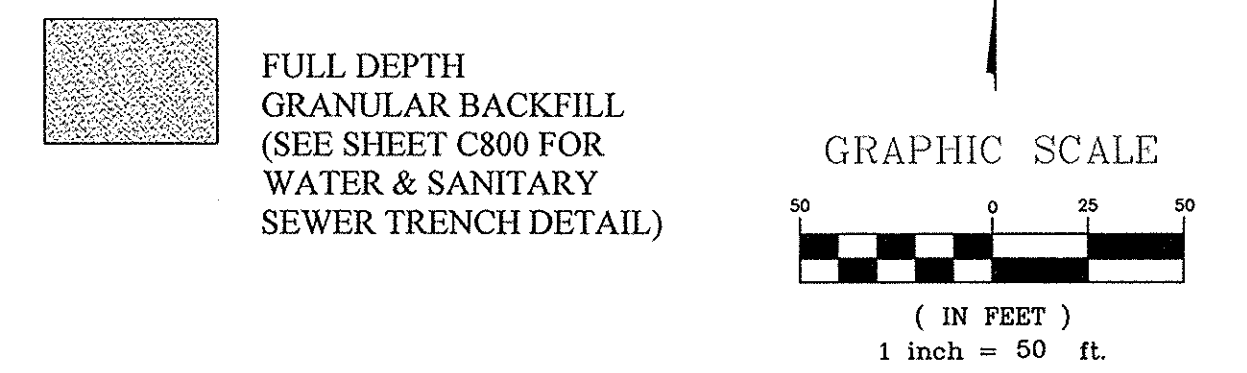
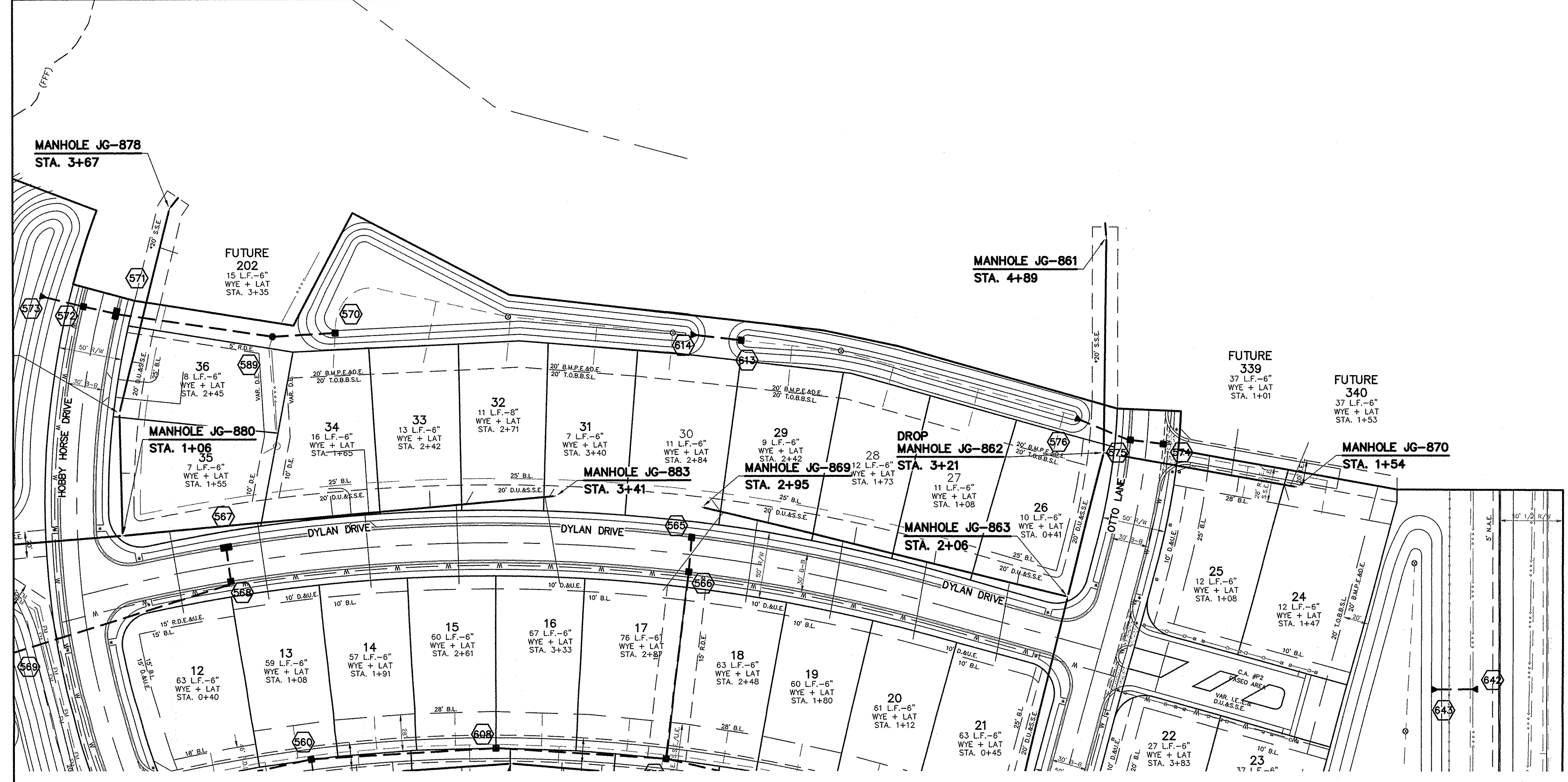
David J. Stoepelwirth  
REGISTERED PROFESSIONAL ENGINEER  
No. 19358  
STATE OF INDIANA

THIS DRAWING IS NOT INTENDED TO BE REPRESENTED AS A RETRACEMENT OR BOUNDARY LOCATION SURVEY OR A SURVEYOR LOCATION REPORT.  
CERTIFIED: 03/21/14  
David J. Stoepelwirth

**STOEPPELWERTH**  
ALWAYS ON  
7965 East 10th Street, Fishers, IN 46038-2505  
phone: 317.849.5925 fax: 317.849.5942

**SANITARY PLAN & PROFILES**  
**JACKSONS GRANT**  
**SECTION 1B**  
HAMILTON COUNTY, INDIANA  
CARMEL

DRAWN BY: JSM  
CHECKED BY: BAH  
SHEET NO. **C500**  
5' x 4' 600 NO.  
60160SIL-51B



NO EARTH DISTURBING ACTIVITIES MAY TAKE PLACE WITHOUT AN APPROVED STORM WATER MANAGEMENT PERMIT.

MIN. SLOPES PER THE TEN STATE STANDARDS SHALL PREVAIL IN ALL CASES.

THE EXTERIORS OF ALL MANHOLES NEED TO BE COATED PER CLAY TOWNSHIP REGIONAL WASTE STANDARDS.

THERE ARE TO BE NO WATER VALVES OR MANHOLES WITHIN THE PAVEMENT, CURB, OR SIDEWALK WITH THE EXCEPTION OF CURB INLETS.

INSTALL A TRACER WIRE WITH ALL MAINS AND SERVICE CONNECTIONS.

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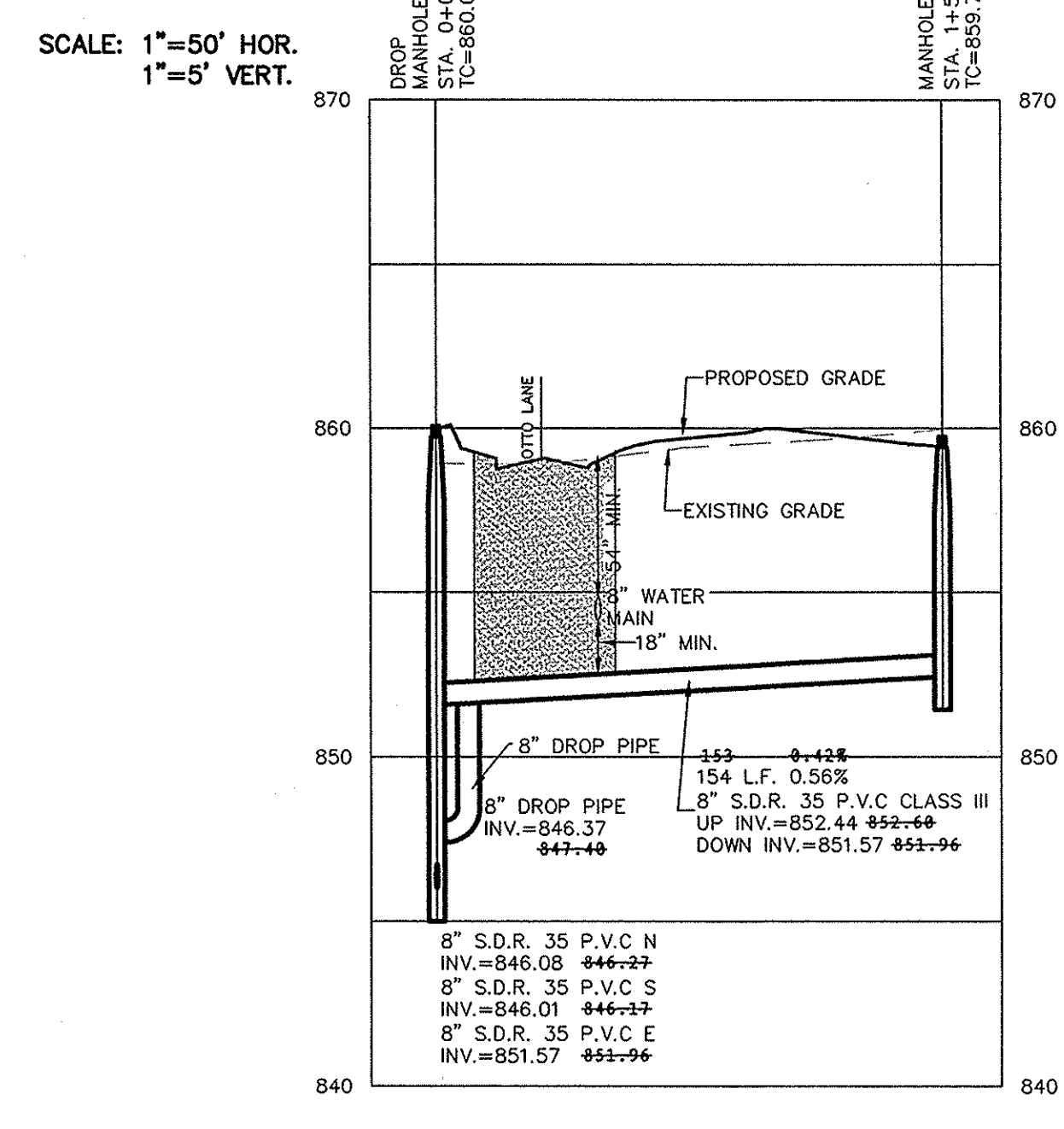
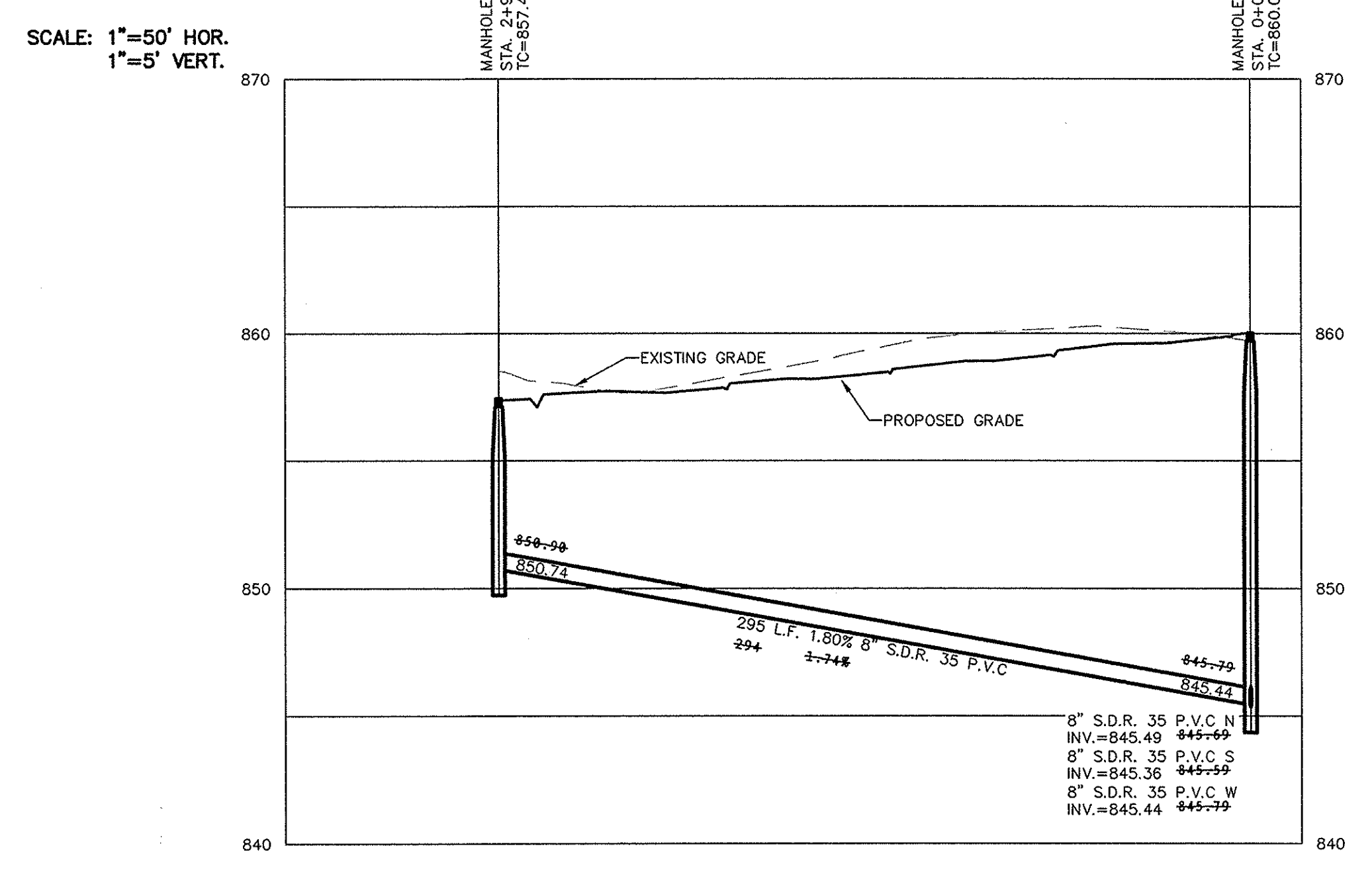
NOTE: ALL FINAL STRUCTURE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE TENTH (0.1') OF A FOOT OF DESIGN GRADE, AND ARE TO BE ESTABLISHED UTILIZING 1-4" RISER RING, NO MORE NO LESS, ON EACH STRUCTURE.

# RECORD DRAWING

*D. D. Olmstead*  
 Dennis D. Olmstead  
 Registered Land Surveyor  
 No. 900012  
 04/11/2016



NOTE: SANITARY LATERALS ARE ASBUILT STATIONING AND LENGTHS.



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 Entry Date: 2017  
 Entered By: SLM

DATE	MARK	REVISIONS
10/07/16		ASBUILT PER TAC COMMENTS
10/30/14		REUSED PER TAC COMMENTS
07/25/14		REUSED PER TAC COMMENTS
07/25/14		REUSED PER TAC COMMENTS

THIS DRAWING IS NOT INTENDED TO BE REPRESENTED AS A RETRACEMENT OR ORIGINAL BOUNDARY SURVEY, A ROUTE SURVEY OR A SURVEYOR LOCATION REPORT.  
 CERTIFIED: 03/21/14  
*David J. Stoppelwirth*  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 19358  
 STATE OF INDIANA

**STOEPPELWERTH**  
 ALWAYS ON  
 7965 East 10th Street, Fishers, IN 46038-2935  
 phone: 317.949.5955 fax: 317.949.5948

**SANITARY PLAN & PROFILES**  
**JACKSONS GRANT**  
**SECTION 1B**  
 HAMILTON COUNTY, INDIANA  
 CARMEL

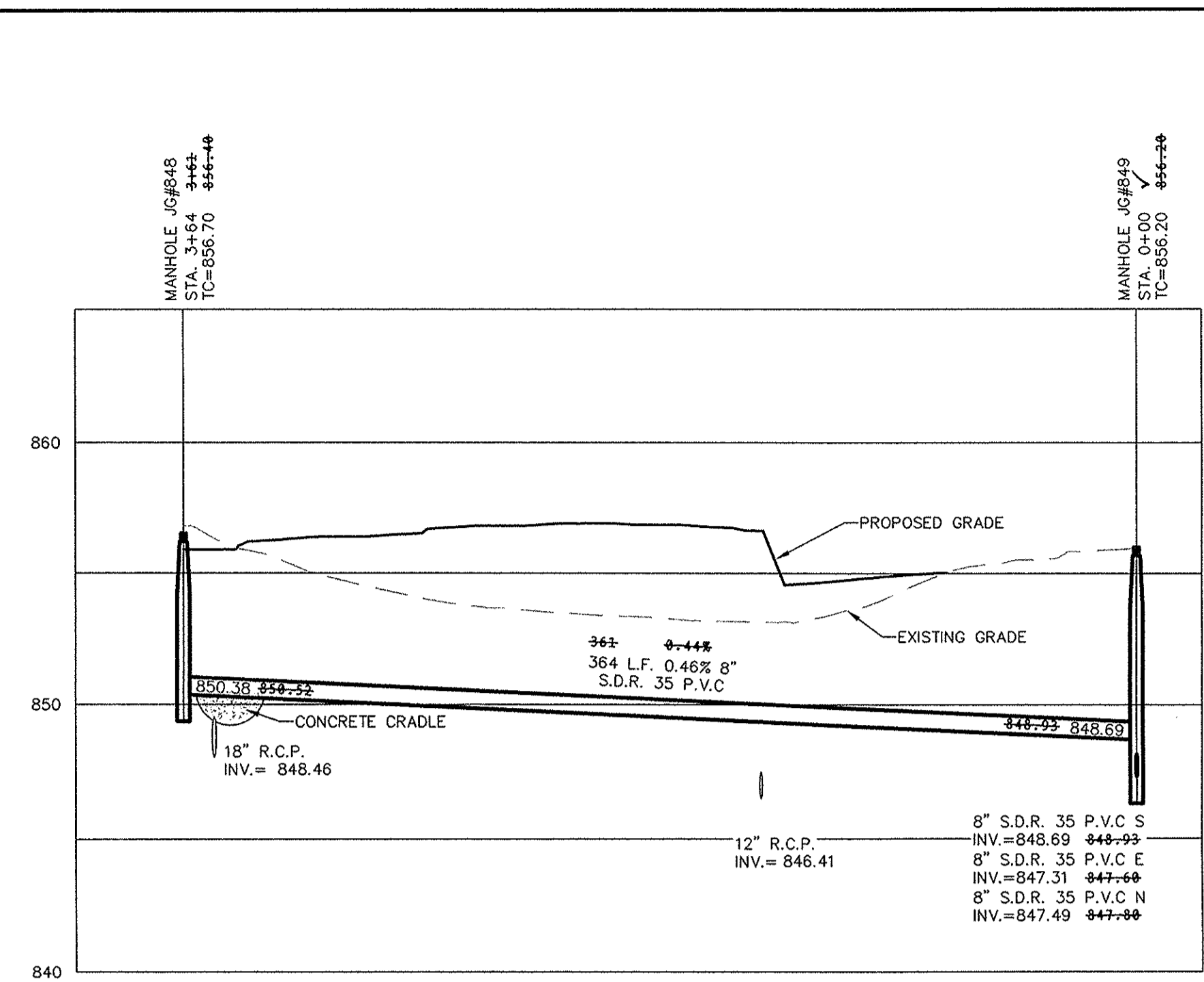
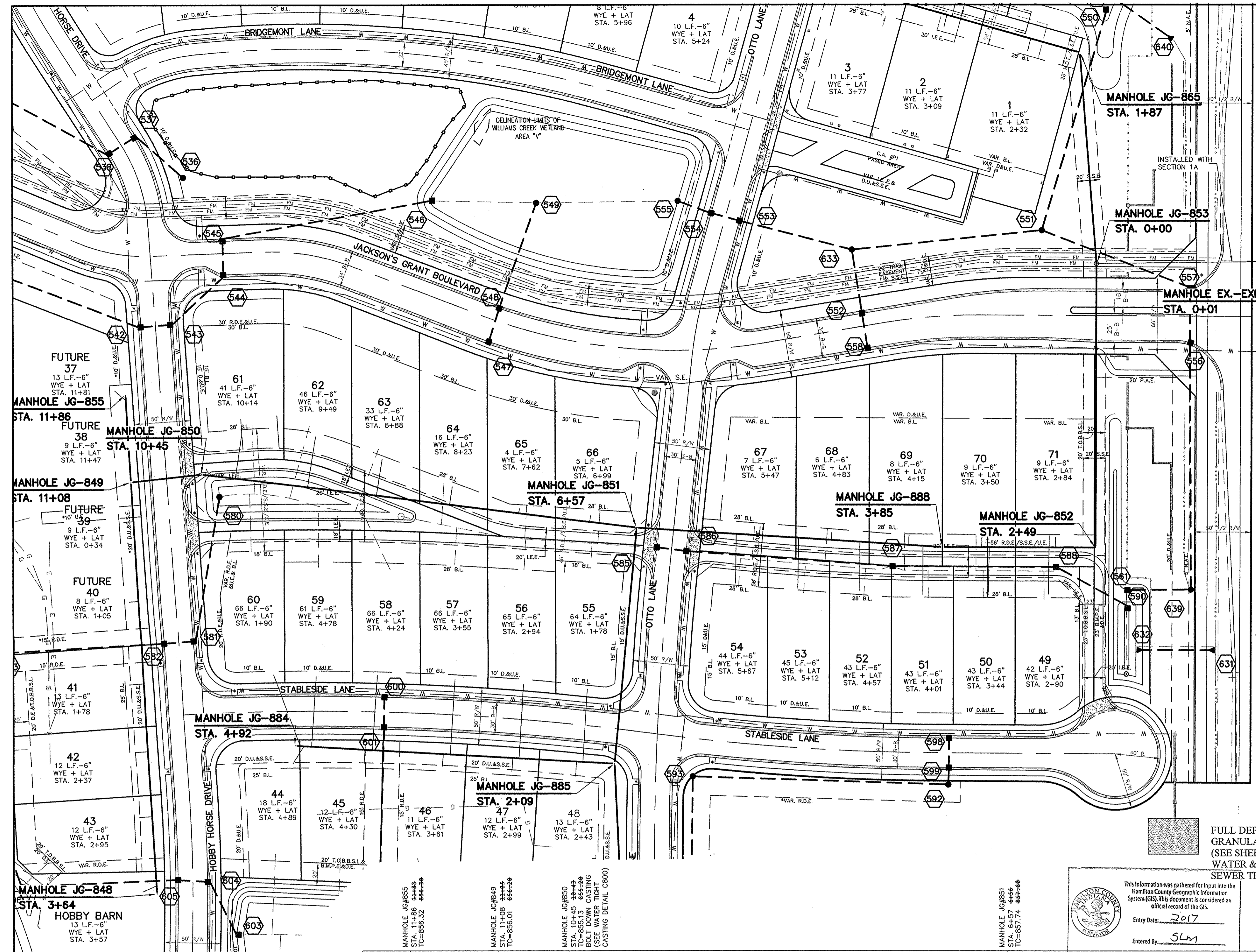
DRAWN BY: JSM  
 CHECKED BY: BAH

SHEET NO. **C501**  
 S & A JOB NO. 60160SIL-S1B

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 Modified / By: April 11, 2016 9:47:19 AM / gmyers  
 Plotted / By: April 11, 2016 1:16:37 PM / Greg Myers



S:\60160SIL-S1BDWG\C500-Sanitary Plan & Profiles.dwg - C502  
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 Plotted / By: Greg Myers



NO EARTH DISTURBING ACTIVITIES MAY TAKE PLACE WITHOUT AN APPROVED STORM WATER MANAGEMENT PERMIT.

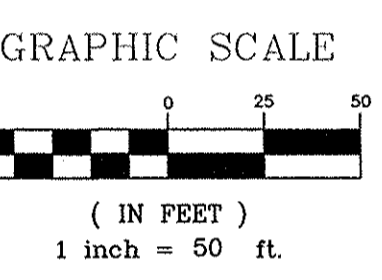
MIN. SLOPES PER THE TEN STATE STANDARDS SHALL PREVAIL IN ALL CASES.

THE EXTERIORS OF ALL MANHOLES NEED TO BE COATED PER CLAY TOWNSHIP REGIONAL WASTE STANDARDS.

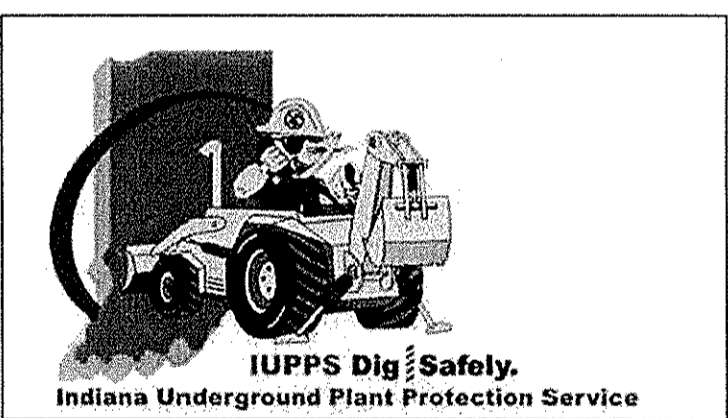
THERE ARE TO BE NO WATER VALVES OR MANHOLES WITHIN THE PAVEMENT, CURB, OR SIDEWALK WITH THE EXCEPTION OF CURB INLETS.

INSTALL A TRACER WIRE WITH ALL MAINS AND SERVICE CONNECTIONS.

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NOTE:  
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**811**  
 Know what's below.  
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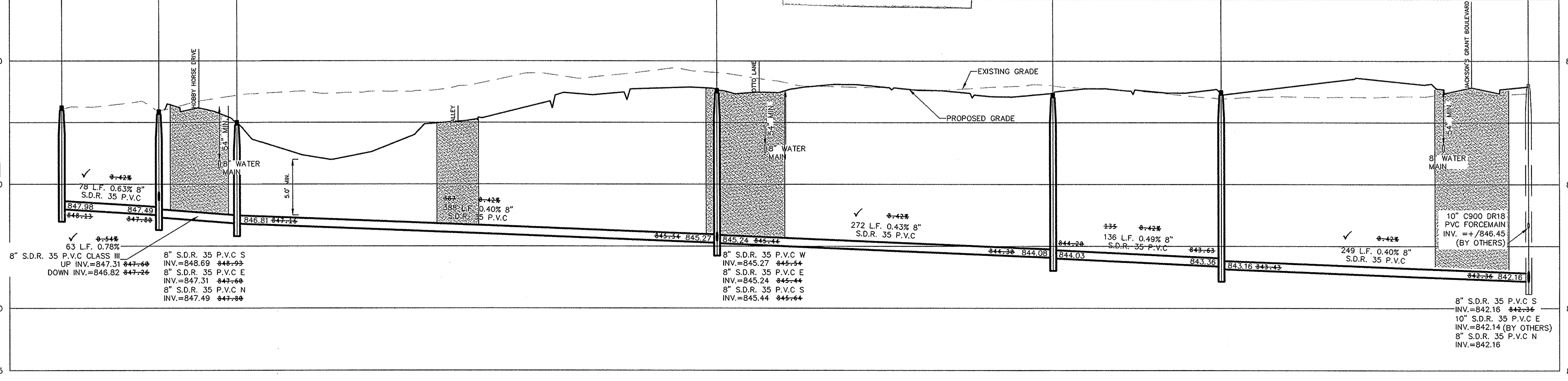
Full Depth Granular Backfill (See Sheet C800 for Water & Sanitary Sewer Trench Detail)

This information was gathered for input into the Hamilton County Geographic Information System (GIS). This document is considered an official record of the GIS.  
 Entry Date: 2017  
 Entered By: SLM

NOTE:  
 SANITARY LATERALS ARE ASBUILT STATIONING AND LENGTHS.

# RECORD DRAWING

**Dennis D. Olmstead**  
 Registered Land Surveyor  
 No. 900012  
 04/11/2016



**STOEPPELWERTH**  
 ALWAYS ON  
 7945 East 100th Street, Fishers, IN 46038-2595  
 phone: 317.890.5985 fax: 317.890.5942

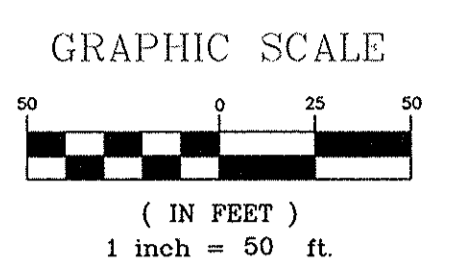
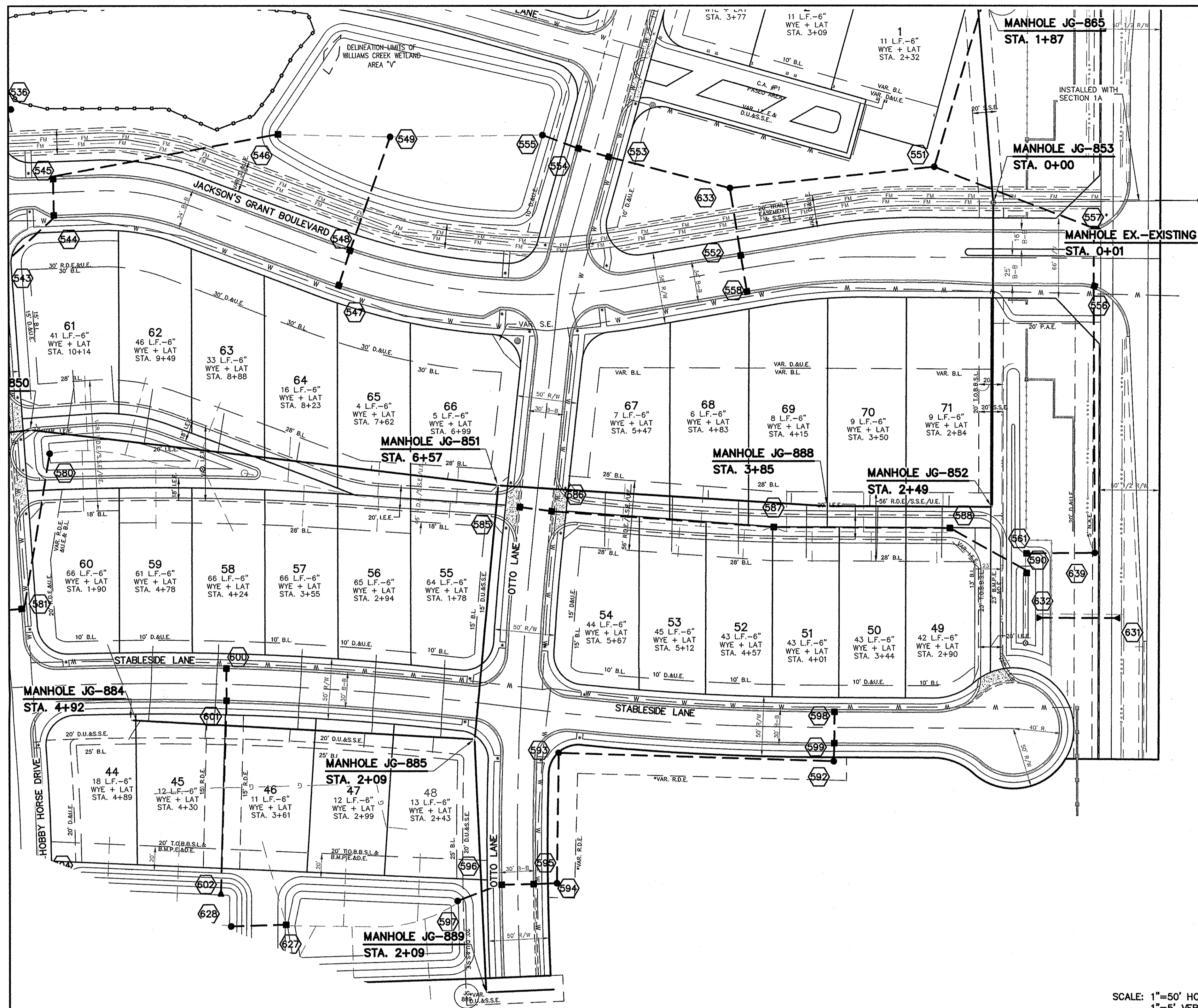
**REGISTERED PROFESSIONAL ENGINEER**  
 No. 19358  
 STATE OF INDIANA  
 David J. Stoppelwerth

**SANITARY PLAN & PROFILES**  
**JACKSON'S GRANT SECTION 1B**  
 HAMILTON COUNTY, INDIANA  
 CARMEL

DATE: 07/25/14  
 MARK: [ ]  
 REVISIONS: [ ]

DATE: 03/21/14  
 CERTIFIED: David J. Stoppelwerth

FILE NO. C502  
 SHEET NO. C502  
 S & A JOB NO. 60160SIL-S1B



FULL DEPTH GRANULAR BACKFILL (SEE SHEET C800 FOR WATER & SANITARY SEWER TRENCH DETAIL)

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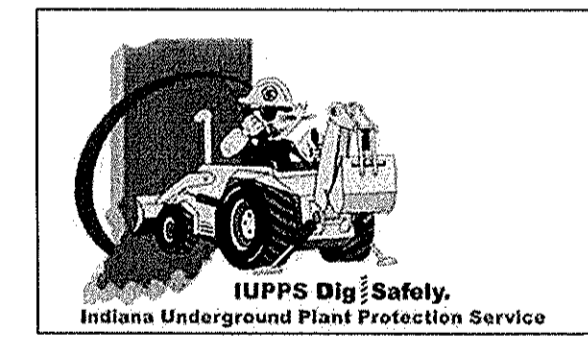
NOTE: SANITARY LATERALS ARE ASBUILT STATIONING AND LENGTHS.

# RECORD DRAWING

Dennis D. Olmstead  
Registered Land Surveyor  
No. 900012



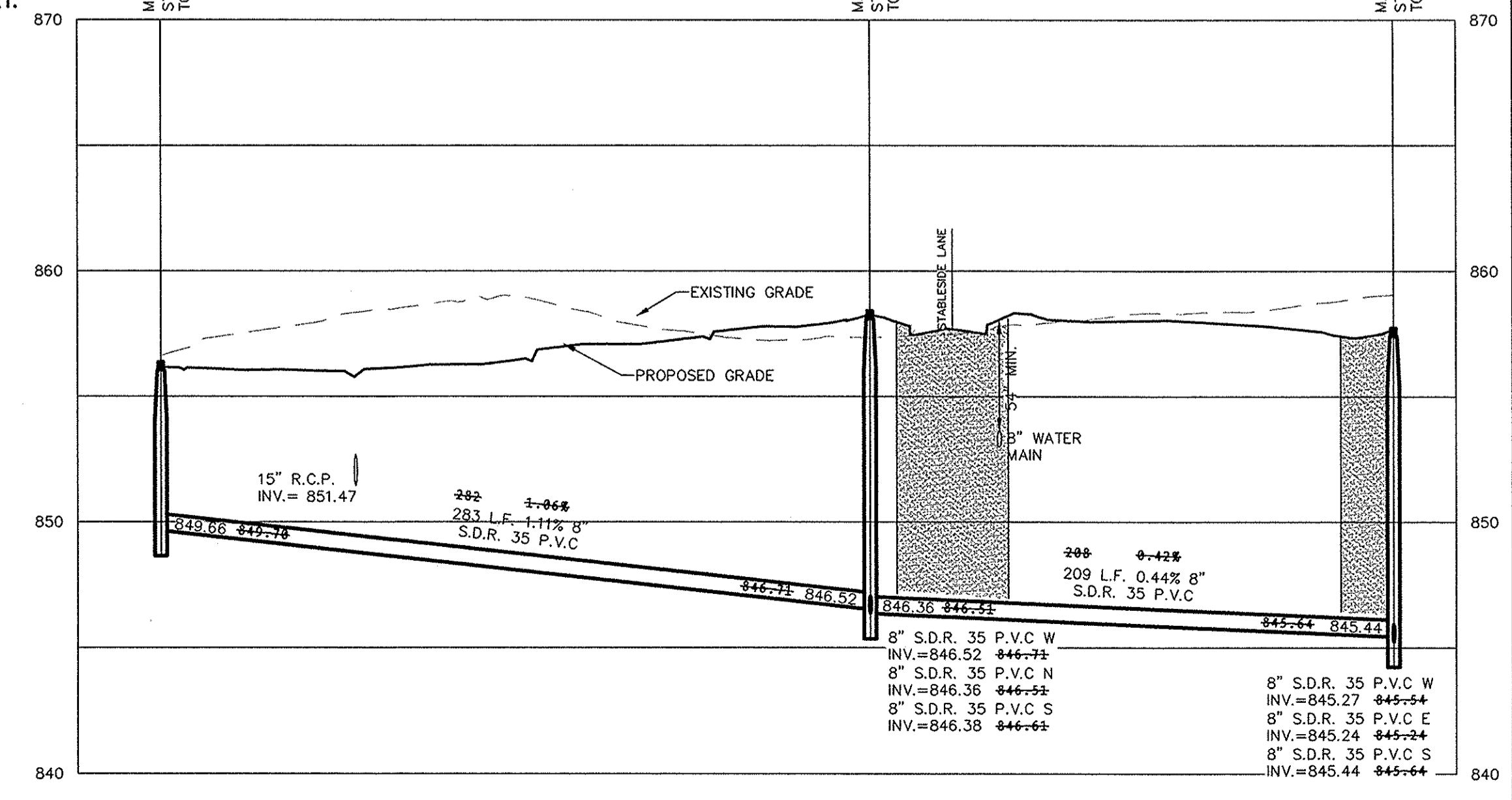
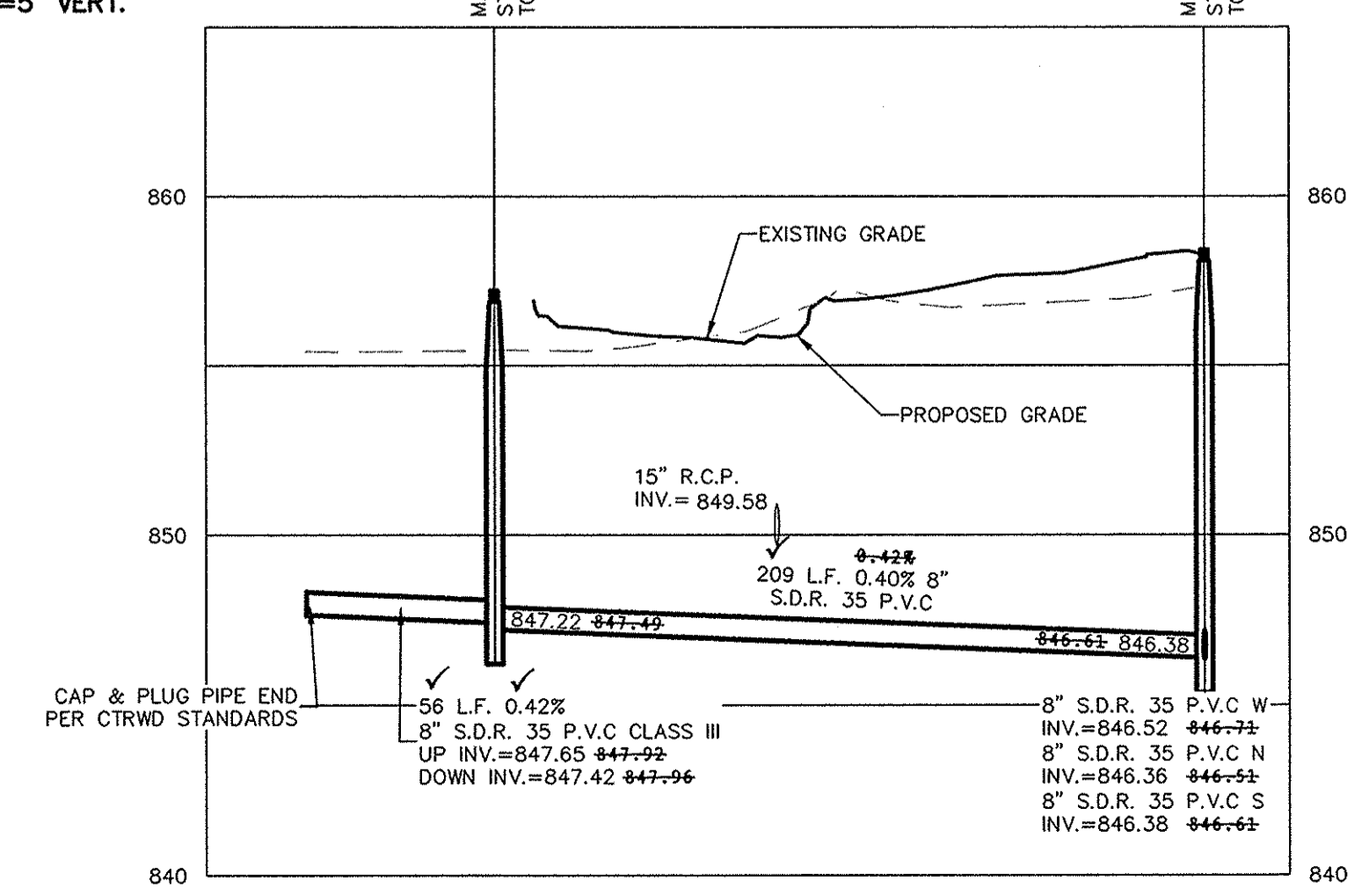
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1"=5' VERT.

SCALE: 1"=50' HOR.  
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DATE	REVISIONS	BY
09/07/16	ASBUILT	JSM
06/25/15	REVISED PER TAC COMMENTS	JSM
10/10/14	REVISED PER TAC COMMENTS	JSM
08/22/14	REVISED PER TAC COMMENTS	JSM
07/25/14	REVISED PER TAC COMMENTS	JSM

DAVID J. STOEPPELWERTH  
REGISTERED PROFESSIONAL ENGINEER  
No. 19358  
STATE OF INDIANA

CERTIFIED: 03/21/14  
David J. Stoepelwerth

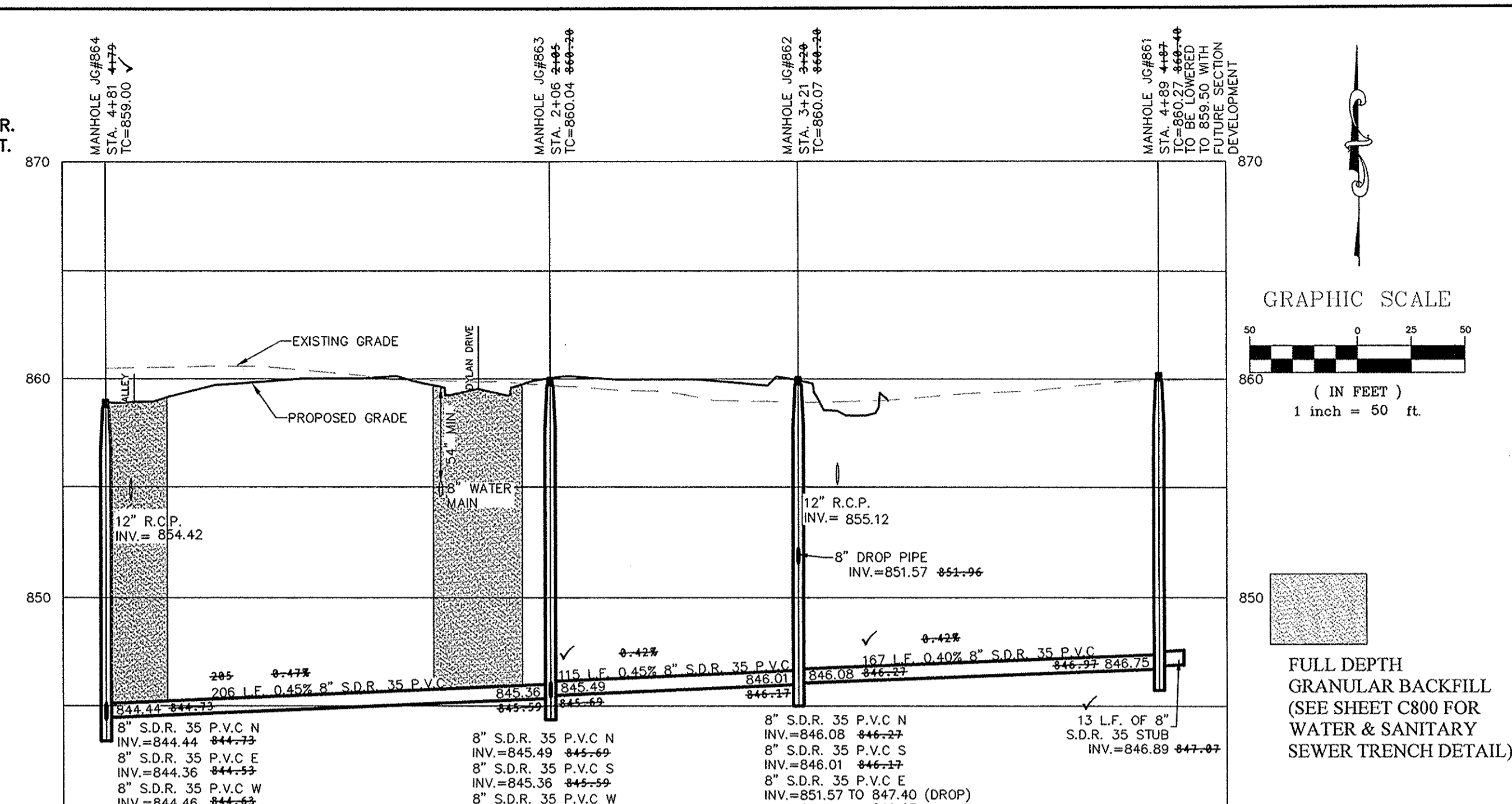
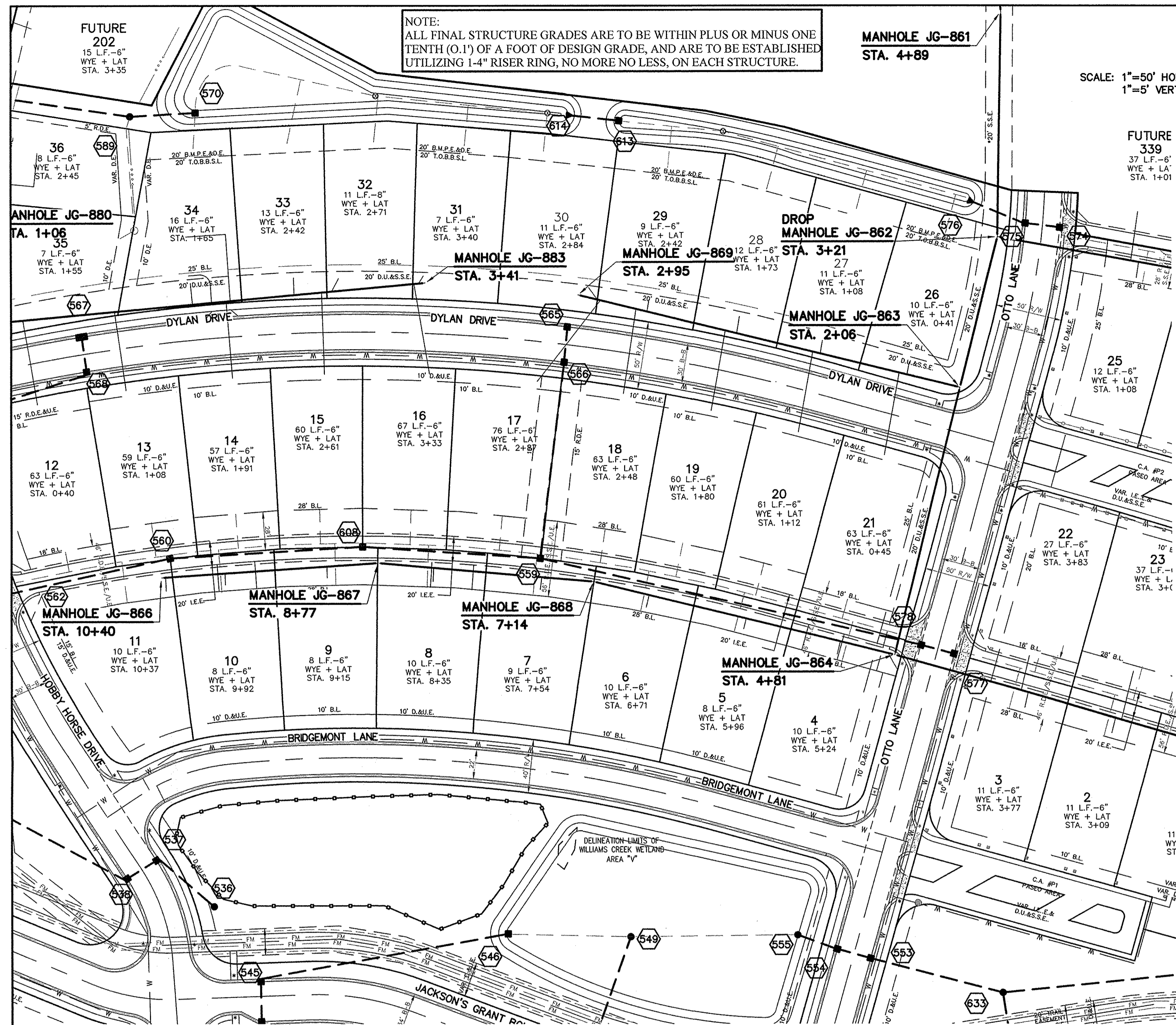
**STOEPPELWERTH**  
ALWAYS ON  
7965 East 10th Street, Fishers, IN 46038-2505  
phone: 317.849.5705 fax: 317.849.5942

**SANITARY PLAN & PROFILES**  
**JACKSONS GRANT**  
**SECTION 1B**  
HAMILTON COUNTY, INDIANA  
CARMEL

DRAWN BY: JSM  
CHECKED BY: BAH

SHEET NO. **C503**  
S & A JOB NO. 601605IL-51B

File Name: S:\801605IL-51B\DWG\C500-Sanitary Plan & Profiles.dwg - C503  
 Modified / By: April 11, 2016 8:47:19 AM / gmyers  
 Plotted / By: April 11, 2016 11:17:44 PM / Greg Myers



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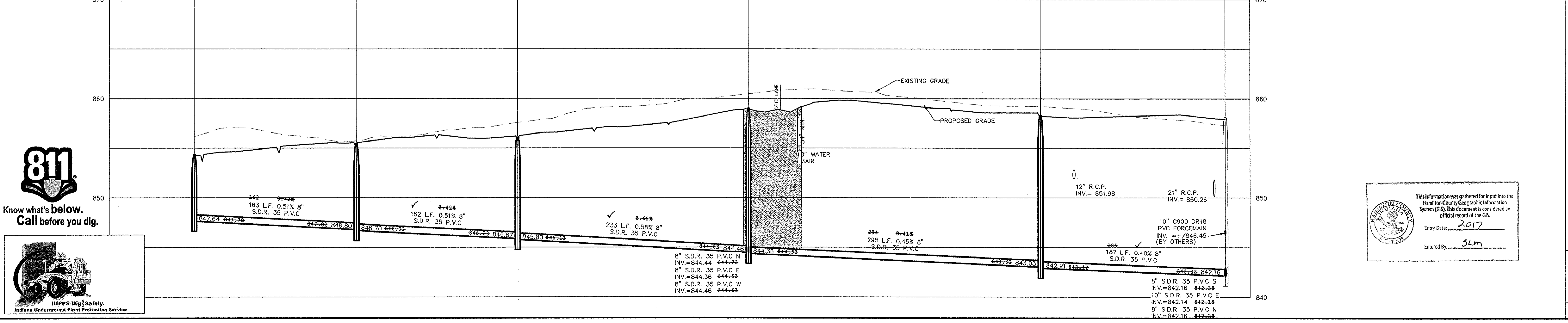
NOTE: SANITARY LATERALS ARE ASBUILT STATIONING AND LENGTHS.

# RECORD DRAWING

Dennis D. Olmstead  
Registered Land Surveyor  
No. 900012



SCALE: 1"=50' HOR.  
1"=5' VERT.



This information was gathered for input into the Hamilton County Geographic Information System (GIS). This document is considered an official record of the GIS.  
Entry Date: 2017  
Entered By: SLM

ASBUILT PER TAC COMMENTS  
REVISED PER TAC COMMENTS  
REVISED PER TAC COMMENTS

DATE: 07/27/14  
DATE: 07/27/14  
DATE: 07/27/14

MARK: REVISIONS

BY: JSM, JSM, JSM

REGISTERED PROFESSIONAL ENGINEER  
No. 19358  
STATE OF INDIANA  
David J. Stappert  
CERTIFIED: 03/21/14

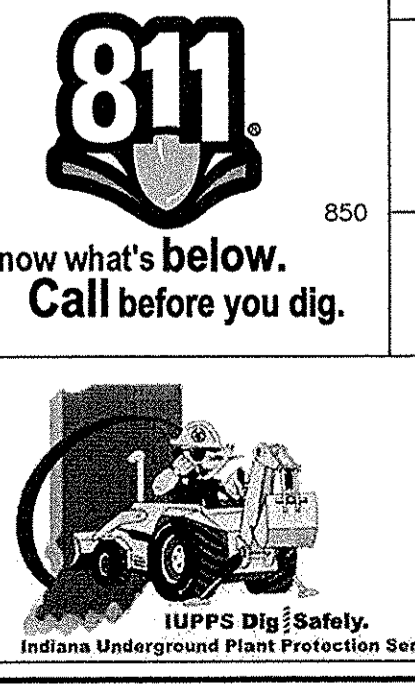
STOEPPELWERTH  
A.L.WATSON  
796 East 10th Street, Fishers, IN 46038-2505  
phone: 317.849.9595 fax: 317.849.9542

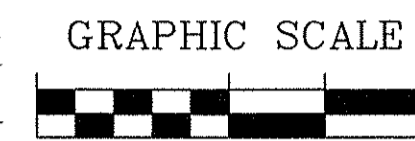
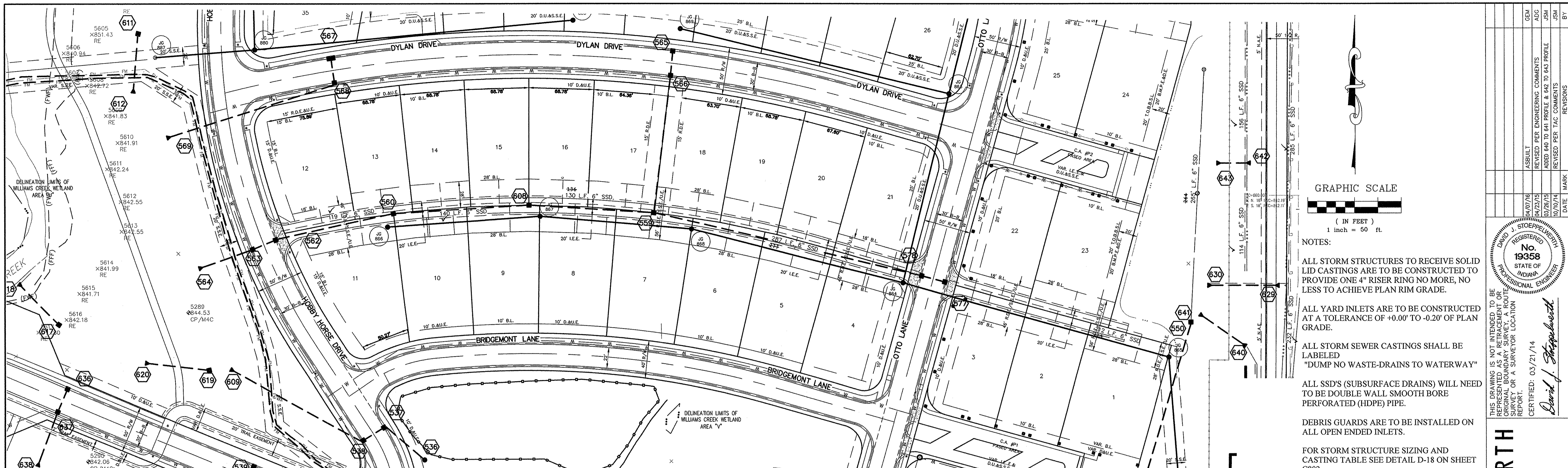
SANITARY PLAN & PROFILES  
JACKSONS GRANT  
SECTION 1B  
HAMILTON COUNTY, INDIANA  
CARMEL

DRAWN BY: JSM  
CHECKED BY: BAH

SHEET NO. C504  
S & A JOB NO. 601605IL-S1B

File Name: S:\601605IL-S1B\DWG\C500-Sanitary Plan & Profiles.dwg - C504  
Date: 11/11/2016 02:19 AM  
Plotted By: Greg Myers  
April 11, 2016 1:18:18 PM



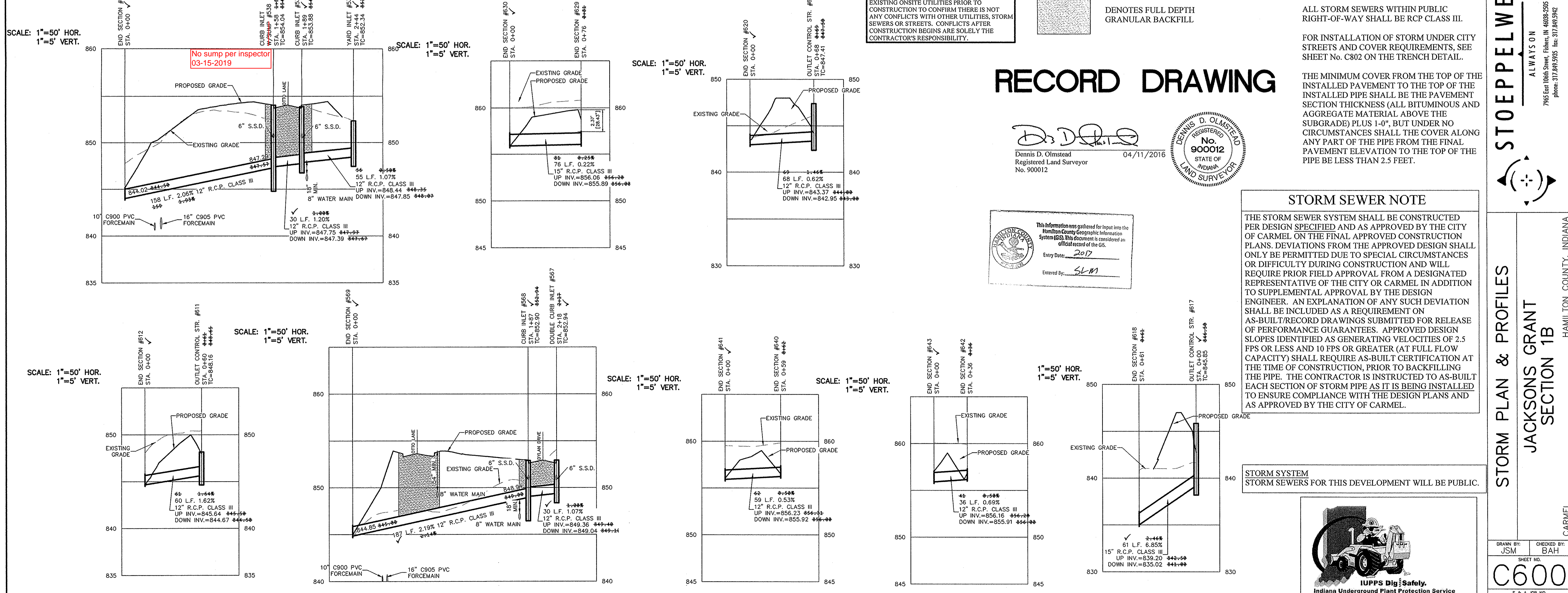


- NOTES:
- ALL STORM STRUCTURES TO RECEIVE SOLID LID CASTINGS ARE TO BE CONSTRUCTED TO PROVIDE ONE 4" RISER RING NO MORE, NO LESS TO ACHIEVE PLAN RIM GRADE.
  - ALL YARD INLETS ARE TO BE CONSTRUCTED AT A TOLERANCE OF +0.00' TO -0.20' OF PLAN GRADE.
  - ALL STORM SEWER CASTINGS SHALL BE LABELED "DUMP NO WASTE-DRAINS TO WATERWAY"
  - ALL SSD'S (SUBSURFACE DRAINS) WILL NEED TO BE DOUBLE WALL SMOOTH BORE PERFORATED (HDPE) PIPE.
  - DEBRIS GUARDS ARE TO BE INSTALLED ON ALL OPEN ENDED INLETS.
  - FOR STORM STRUCTURE SIZING AND CASTING TABLE SEE DETAIL D-18 ON SHEET C802.
  - ALL STORM SEWERS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE RCP CLASS III.
  - FOR INSTALLATION OF STORM UNDER CITY STREETS AND COVER REQUIREMENTS, SEE SHEET No. C802 ON THE TRENCH DETAIL.
  - THE MINIMUM COVER FROM THE TOP OF THE INSTALLED PAVEMENT TO THE TOP OF THE INSTALLED PIPE SHALL BE THE PAVEMENT SECTION THICKNESS (ALL BITUMINOUS AND AGGREGATE MATERIAL ABOVE THE SUBGRADE) PLUS 1'-0", BUT UNDER NO CIRCUMSTANCES SHALL THE COVER ALONG ANY PART OF THE PIPE FROM THE FINAL PAVEMENT ELEVATION TO THE TOP OF THE PIPE BE LESS THAN 2.5 FEET.

CONTRACTOR SHALL VERIFY DEPTHS OF ALL EXISTING ON SITE UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM THERE IS NOT ANY CONFLICTS WITH OTHER UTILITIES, STORM SEWERS OR STREETS. CONFLICTS AFTER CONSTRUCTION BEGINS ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY.

DAVID D. OLNSTEAD  
REGISTERED LAND SURVEYOR  
No. 19358  
STATE OF INDIANA

CERTIFIED: 03/21/14  
*David J. Shappert*



# RECORD DRAWING

Dennis D. Olmstead  
Registered Land Surveyor  
No. 900012  
04/11/2016

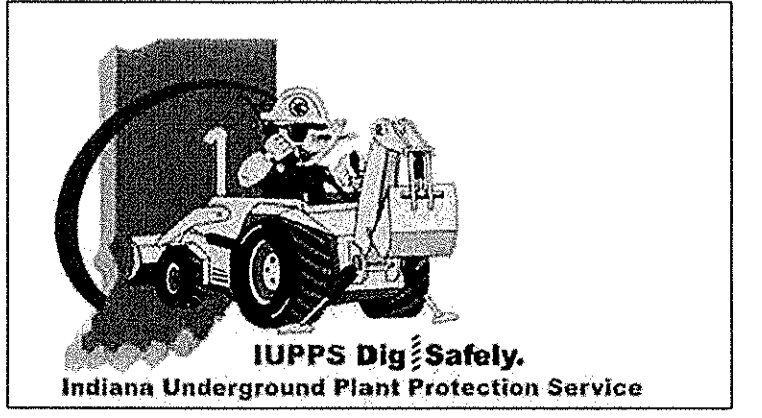


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Entry Date: 2017  
Entered By: SLM

**STORM SEWER NOTE**

THE STORM SEWER SYSTEM SHALL BE CONSTRUCTED PER DESIGN SPECIFIED AND AS APPROVED BY THE CITY OF CARMEL ON THE FINAL APPROVED CONSTRUCTION PLANS. DEVIATIONS FROM THE APPROVED DESIGN SHALL ONLY BE PERMITTED DUE TO SPECIAL CIRCUMSTANCES OR DIFFICULTY DURING CONSTRUCTION AND WILL REQUIRE PRIOR FIELD APPROVAL FROM A DESIGNATED REPRESENTATIVE OF THE CITY OR CARMEL IN ADDITION TO SUPPLEMENTAL APPROVAL BY THE DESIGN ENGINEER. AN EXPLANATION OF ANY SUCH DEVIATION SHALL BE INCLUDED AS A REQUIREMENT ON AS-BUILT/RECORD DRAWINGS SUBMITTED FOR RELEASE OF PERFORMANCE GUARANTEES. APPROVED DESIGN SLOPES IDENTIFIED AS GENERATING VELOCITIES OF 2.5 FPS OR LESS AND 10 FPS OR GREATER (AT FULL FLOW CAPACITY) SHALL REQUIRE AS-BUILT CERTIFICATION AT THE TIME OF CONSTRUCTION, PRIOR TO BACKFILLING THE PIPE. THE CONTRACTOR IS INSTRUCTED TO AS-BUILT EACH SECTION OF STORM PIPE AS IT IS BEING INSTALLED TO ENSURE COMPLIANCE WITH THE DESIGN PLANS AND AS APPROVED BY THE CITY OF CARMEL.

STORM SYSTEM  
STORM SEWERS FOR THIS DEVELOPMENT WILL BE PUBLIC.



GEA	REVISIONS
ACC	DATE
JSM	MARK
USM	

STORM PLAN & PROFILES  
JACKSONS GRANT SECTION 1B

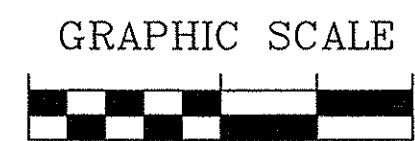
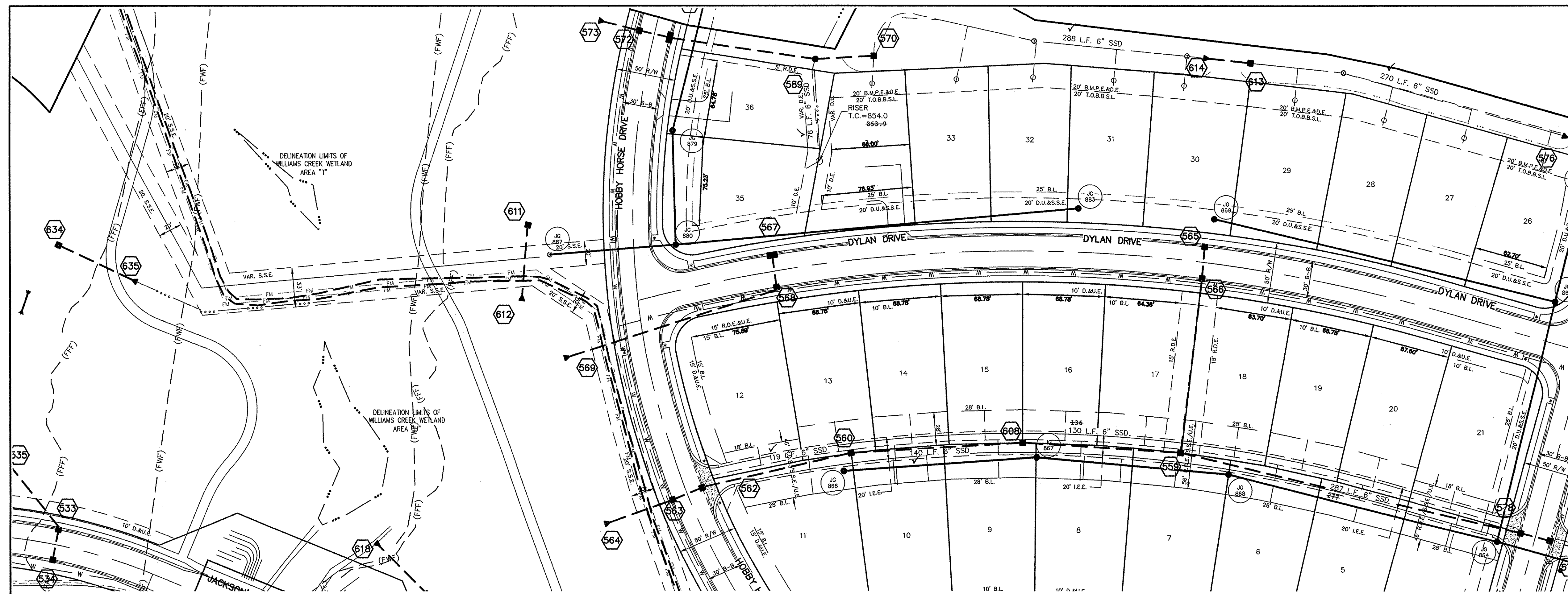
DRAWN BY: JSM  
CHECKED BY: BAH

SHEET NO. **C600**

NO. 63 A JOB NO. 60160SIL-31B

HAMILTON COUNTY, INDIANA  
CARMEL

S:\60160SIL-31B\DWG\C600-Storm Plan & Profiles.dwg - C600  
April 18, 2016 7:40:45 AM / gmyers  
April 18, 2016 8:02:45 AM / Greg Myers



NOTES:  
 ( IN FEET )  
 1 inch = 50 ft.

ALL STORM STRUCTURES TO RECEIVE SOLID LID CASTINGS ARE TO BE CONSTRUCTED TO PROVIDE ONE 4" RISER RING NO MORE, NO LESS TO ACHIEVE PLAN RIM GRADE.

ALL YARD INLETS ARE TO BE CONSTRUCTED AT A TOLERANCE OF +0.00' TO -0.20' OF PLAN GRADE.

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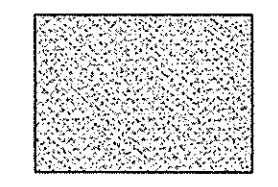
FOR STORM STRUCTURE SIZING AND CASTING TABLE SEE DETAIL D-18 ON SHEET C802.

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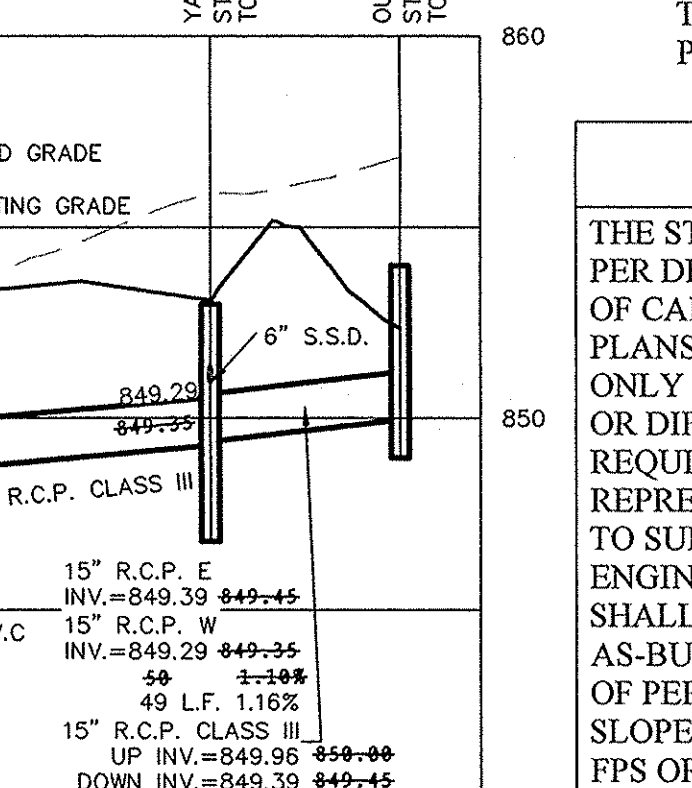
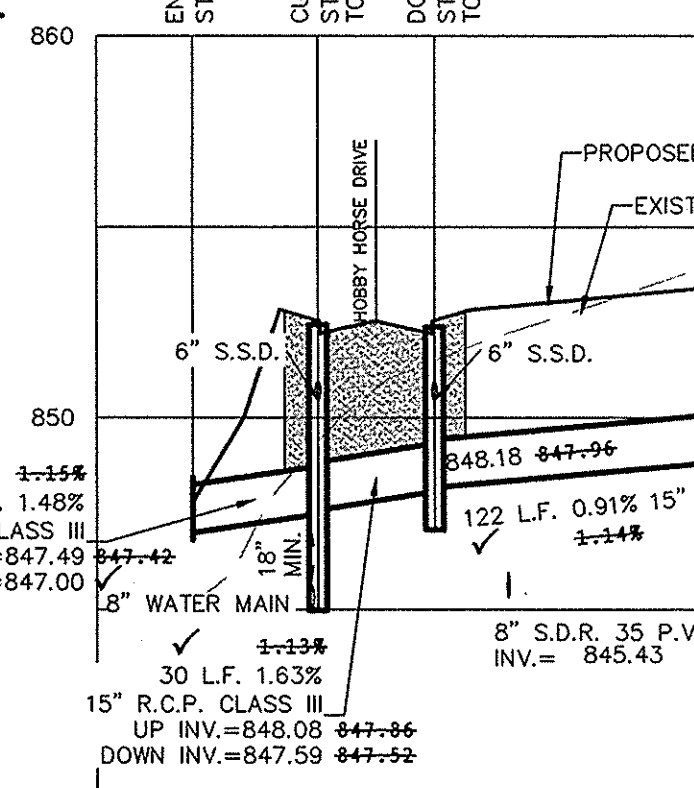
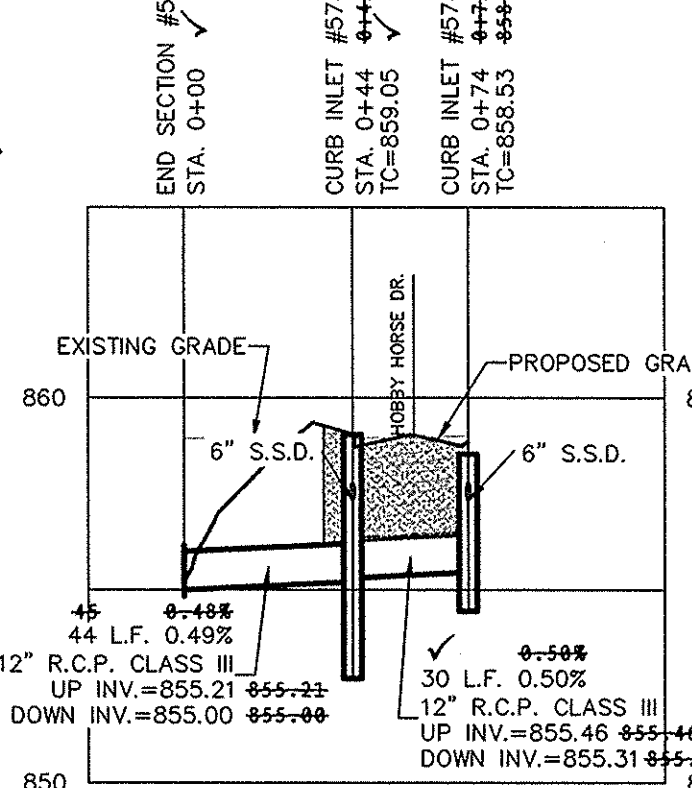
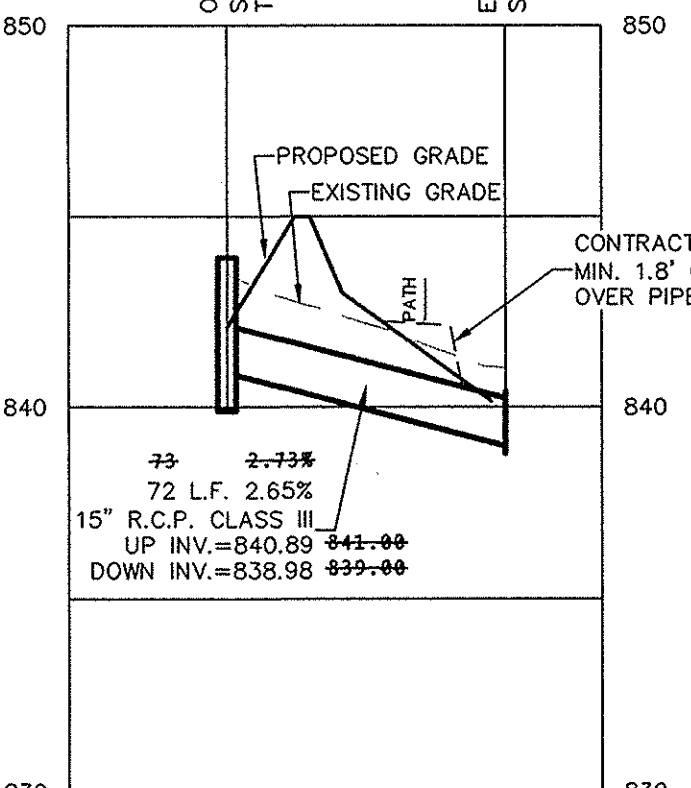
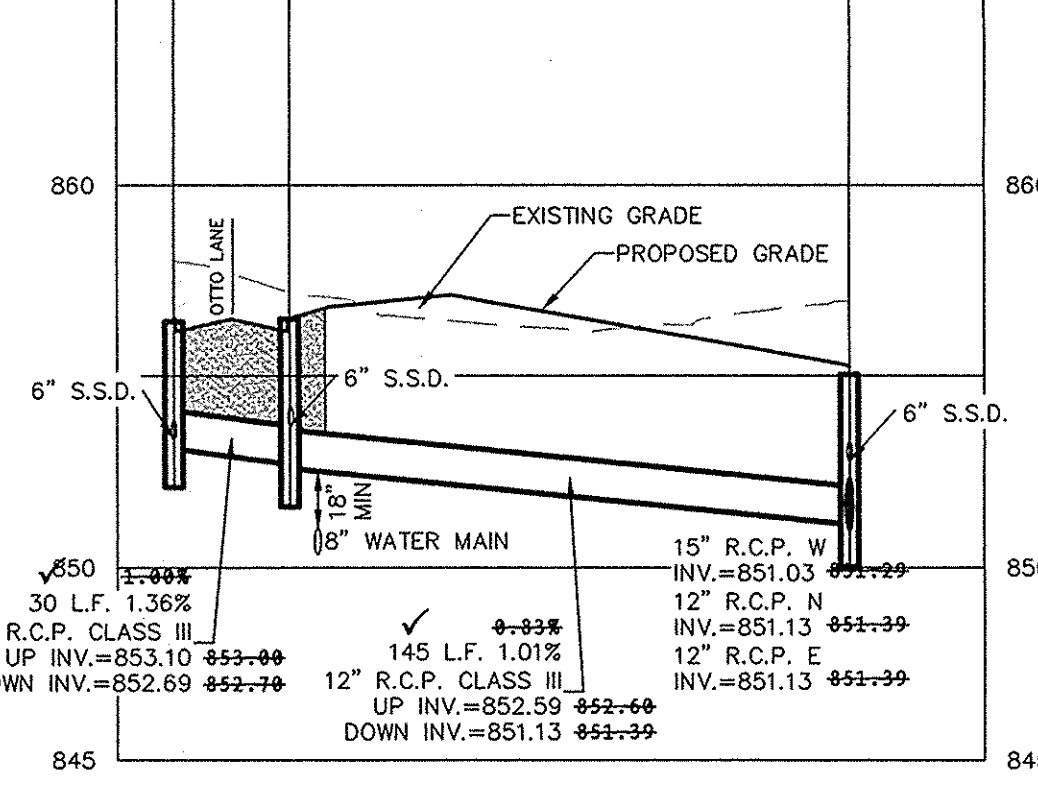
DENOTES FULL DEPTH GRANULAR BACKFILL

SCALE: 1"=50' HOR.  
 1"=5' VERT.

SCALE: 1"=50' HOR.  
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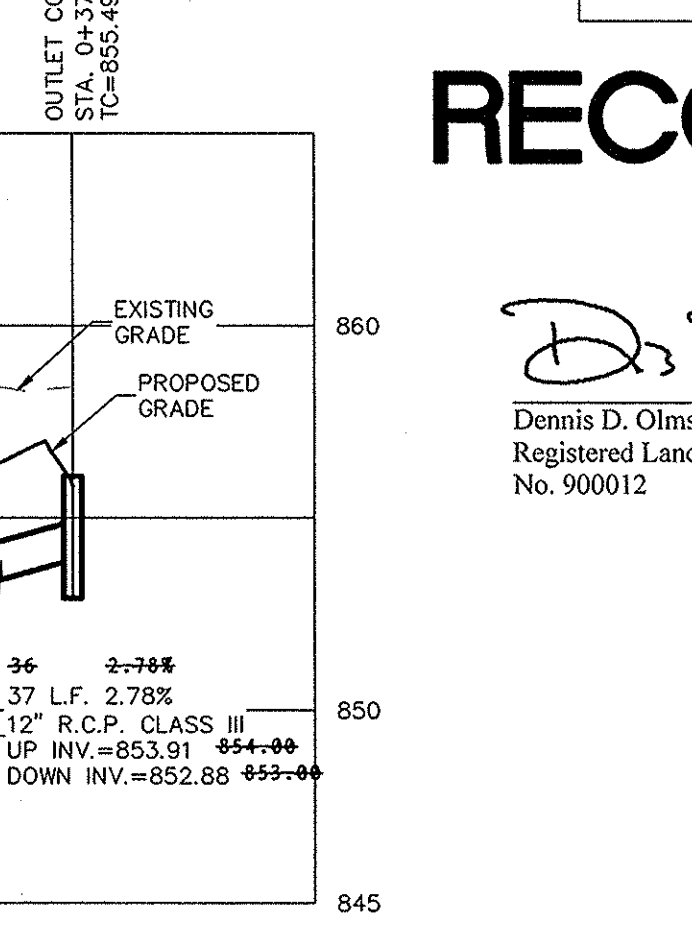
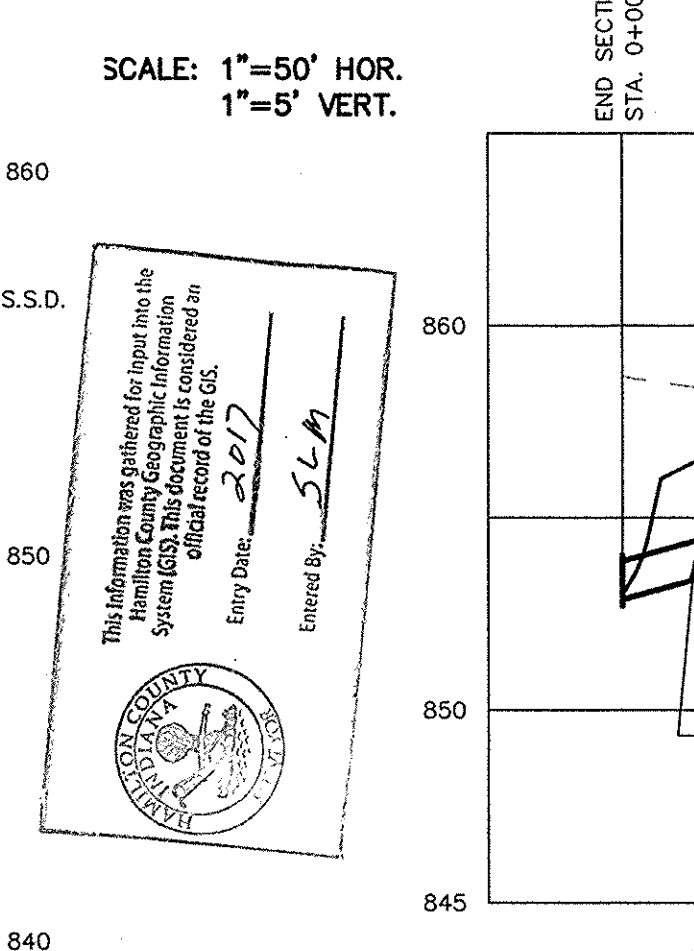
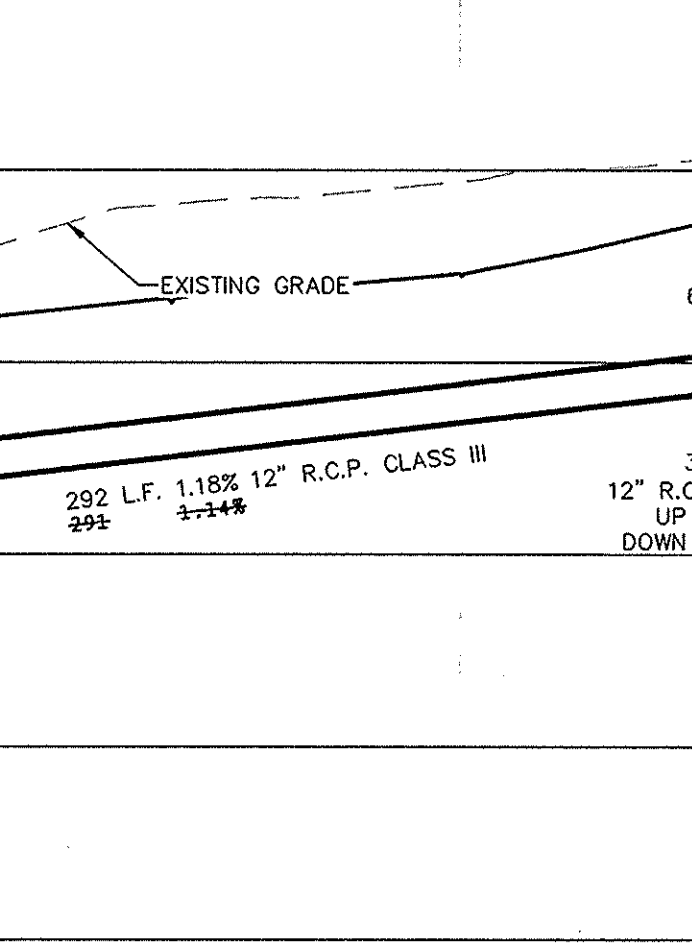
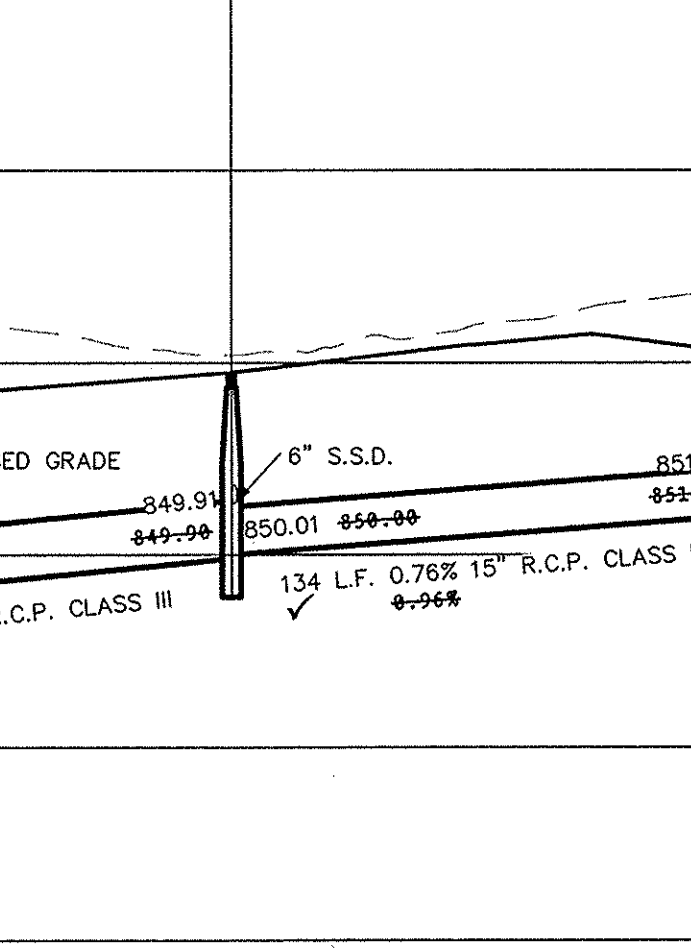
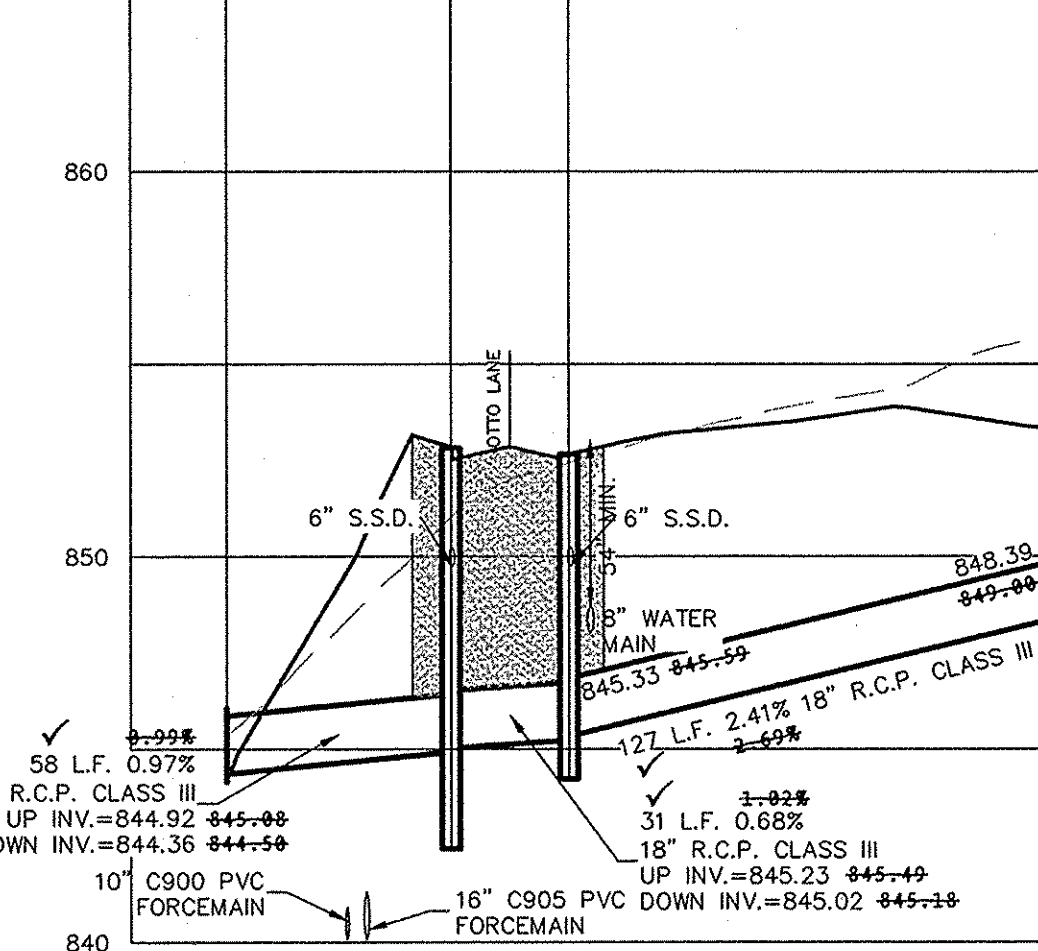
STORM SYSTEM  
 STORM SEWERS FOR THIS DEVELOPMENT WILL BE PUBLIC.

SCALE: 1"=50' HOR.  
 1"=5' VERT.

SCALE: 1"=50' HOR.  
 1"=5' VERT.

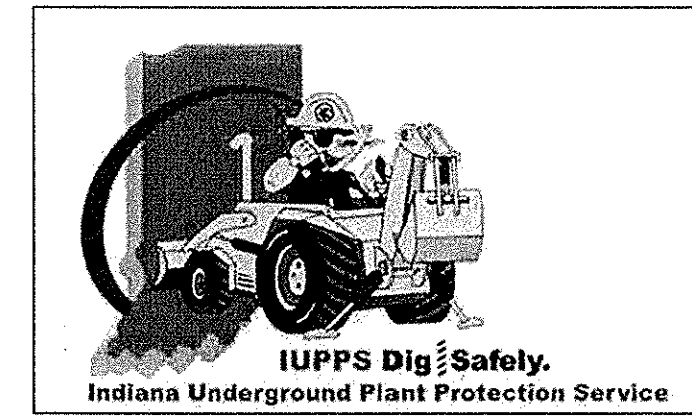
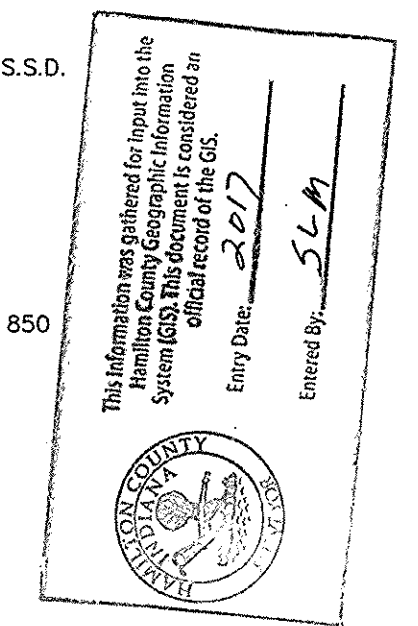
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 1"=5' VERT.



**RECORD DRAWING**

Dennis D. Olmstead  
 Registered Land Surveyor  
 No. 900012



ASBUILT	04/07/16	DATE	MARK	REVISIONS	BY
REVISED 1/2" ELEV. IN RIBBON CURB ALLEY AREAS	11/17/15				JSM
REVISED BMP LAYOUT PER CLIENT REQUEST	10/29/15				JSM
REVISED STORM LOCATION AND T.C'S	08/21/15				JSM
REVISED PER ENGINEERING COMMENTS	04/21/15				ADG
MOVED PROFILE 845-559 FROM CROD TO C801	02/28/15				JSM

DAVID STOEPPELWERTH  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 19358  
 STATE OF INDIANA  
 CERTIFIED: 03/21/14  
 David J. Stappert

**STOEPPELWERTH**  
 ALI WATSON  
 7965 East 10th Street, Fishers, IN 46038-2305  
 phone: 317.949.5935 fax: 317.949.5942

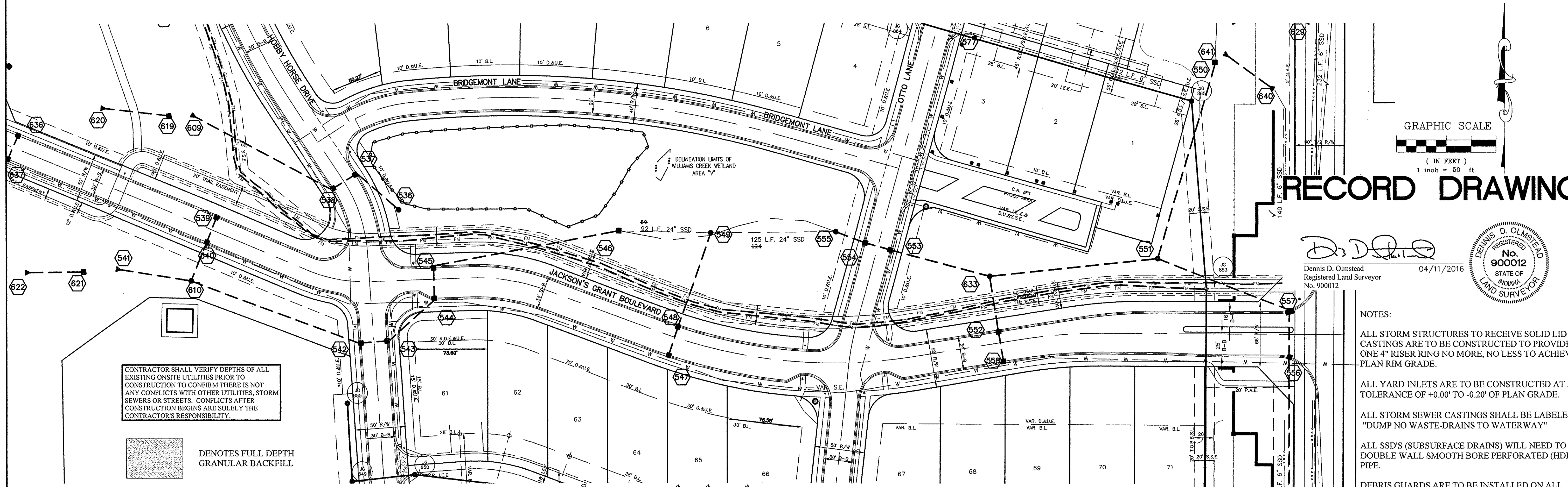
HAMILTON COUNTY, INDIANA

**STORM PLAN & PROFILES**  
**JACKSONS GRANT**  
**SECTION 1B**

DRAWN BY: JSM  
 CHECKED BY: BAH

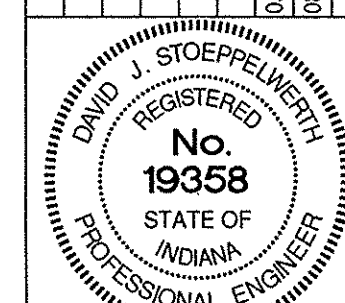
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 3 & A JOB NO. 60160SIL-S1B

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 Plotted / By: April 18, 2016 8:04:22 AM / Greg Myers



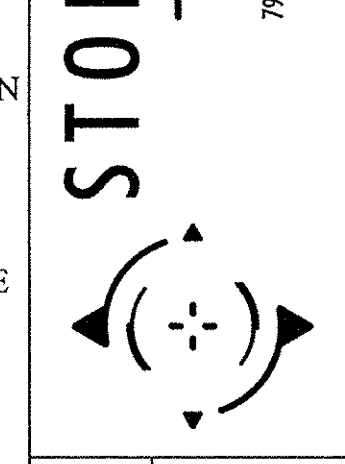
# RECORD DRAWING

Dennis D. Olmstead  
Registered Land Surveyor  
No. 900012  
04/11/2016



THIS DRAWING IS NOT INTENDED TO BE REPRESENTED AS A RECORD DRAWING FOR SURVEY OR A SURVEYOR LOCATION REPORT.  
CERTIFIED: 03/21/14  
David J. Stoepelwerth

**STOEPPELWERTH**  
ALWAYS ON  
796 East 106th Street, Fishers, IN 46038-2005  
phone: 317-849-5935 fax: 317-849-5942



HAMILTON COUNTY, INDIANA

STORM PLAN & PROFILES  
JACKSONS GRANT  
SECTION 1B

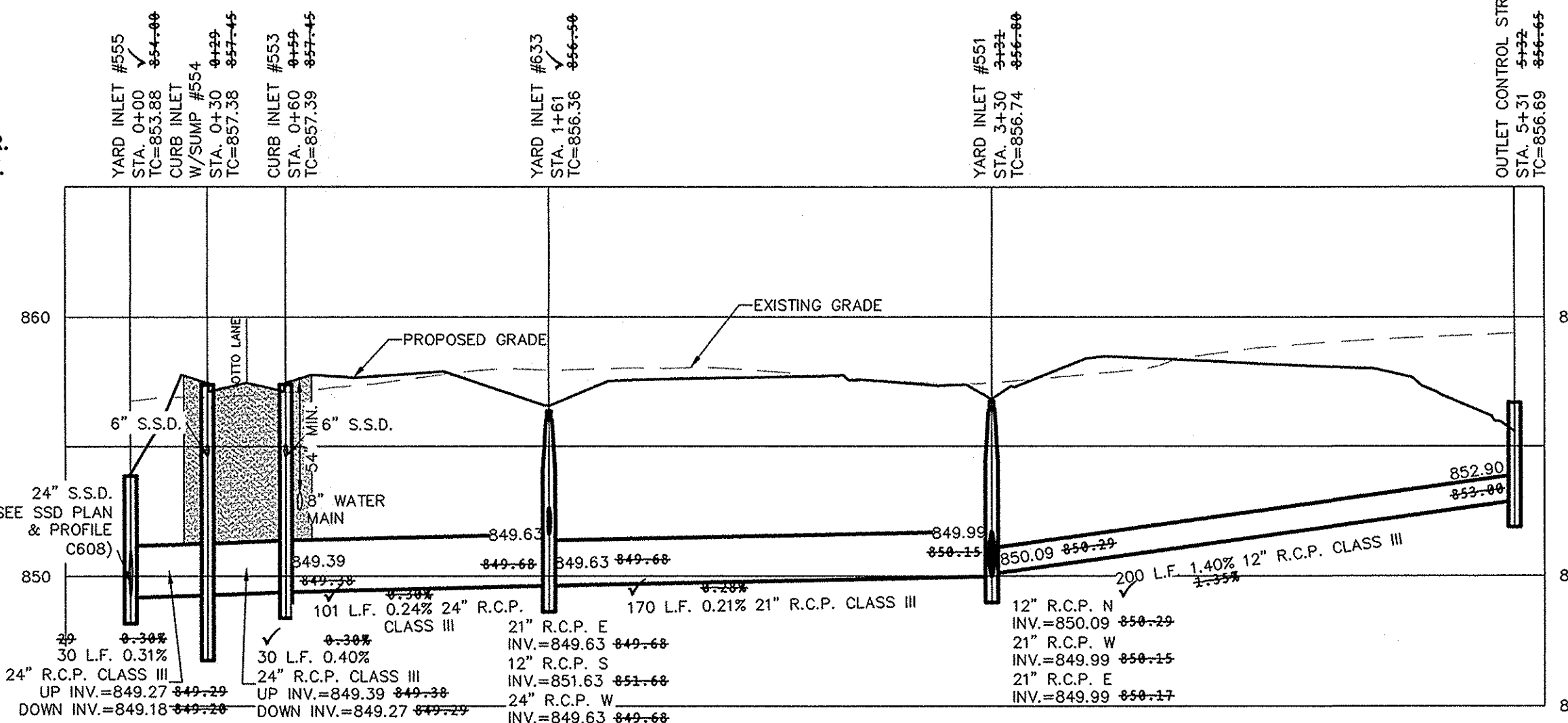
DRAWN BY: JSM  
CHECKED BY: BAH  
SHEET NO. **C602**  
S & A JOB NO. 60160SIL-S1B

CONTRACTOR SHALL VERIFY DEPTHS OF ALL EXISTING ON-SITE UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM THERE IS NOT ANY CONFLICTS WITH OTHER UTILITIES, STORM SEWERS OR STREETS. CONFLICTS AFTER CONSTRUCTION BEGINS ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY.

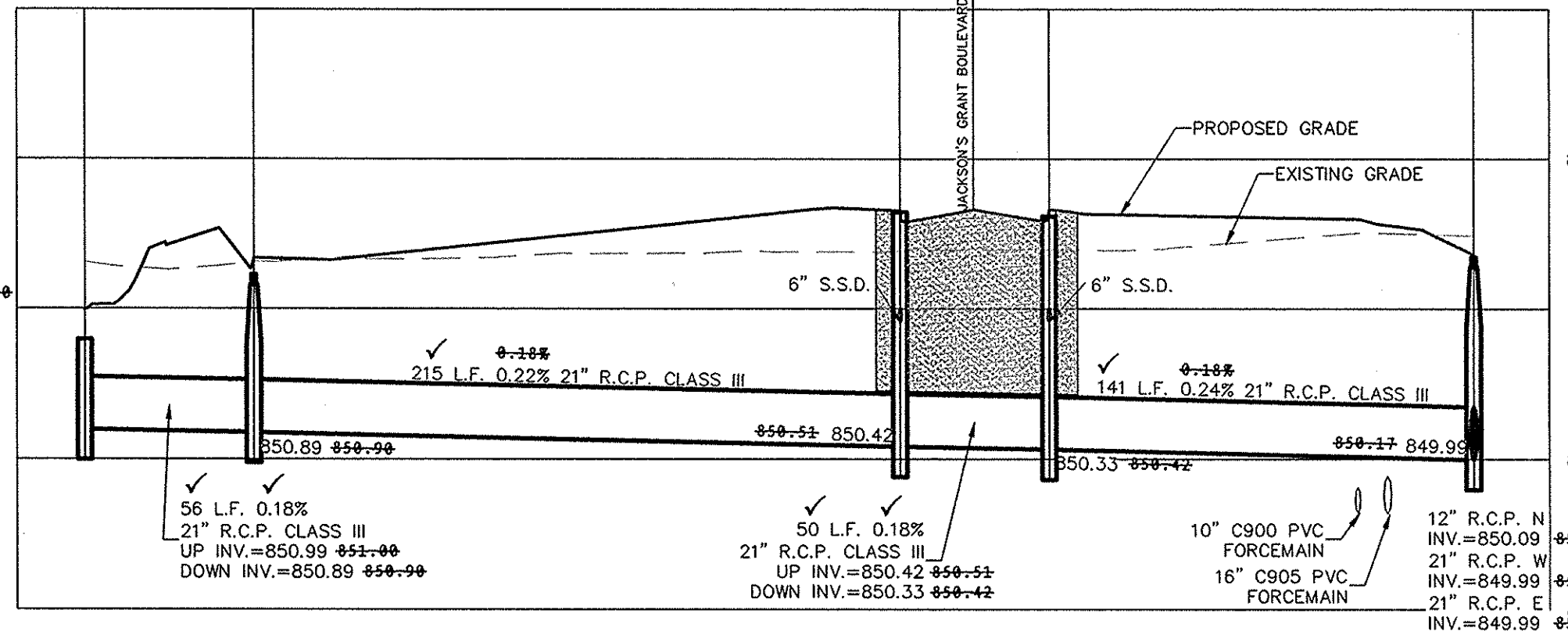
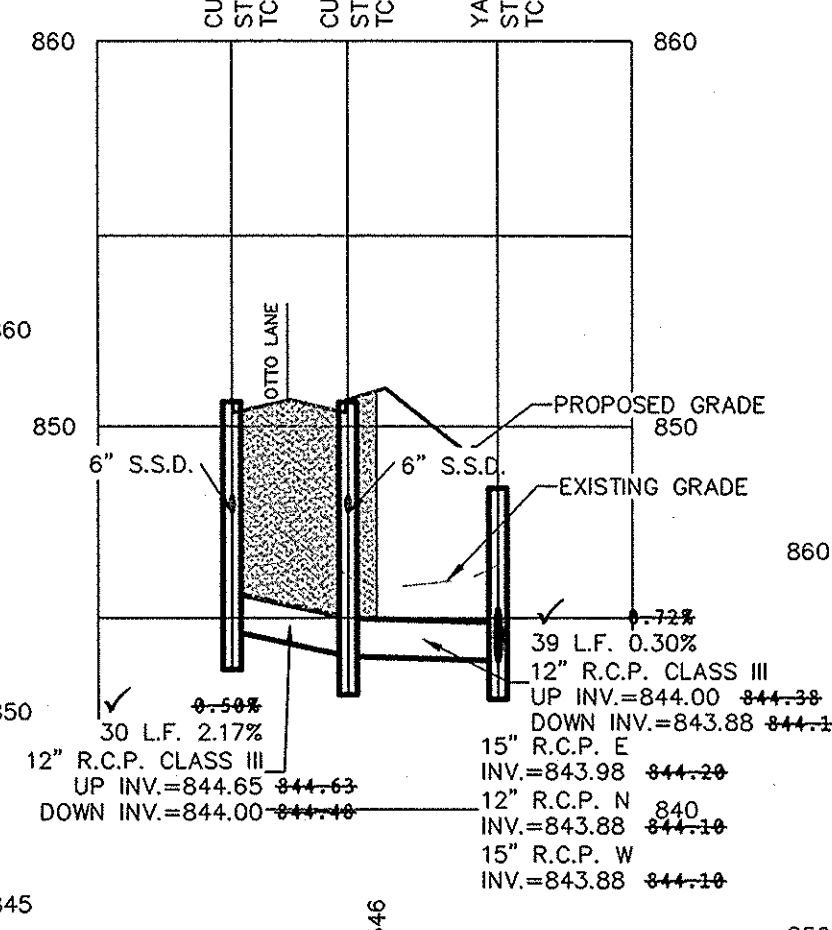
■ DENOTES FULL DEPTH GRANULAR BACKFILL

- NOTES:
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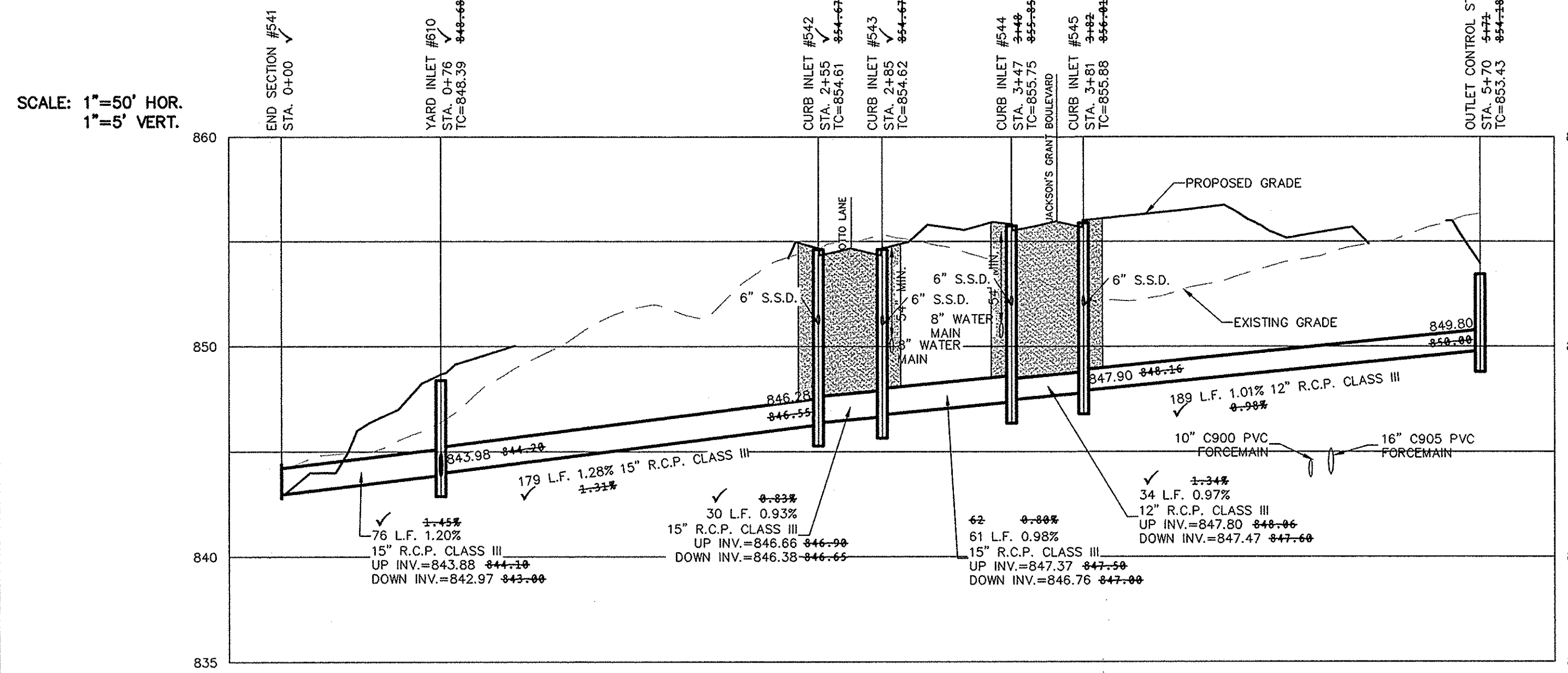
This information was gathered for input into the Hamilton County Geographic Information System (GIS). This document is considered an official record of the GIS.  
Entry Date: 2017  
Entered By: SKM



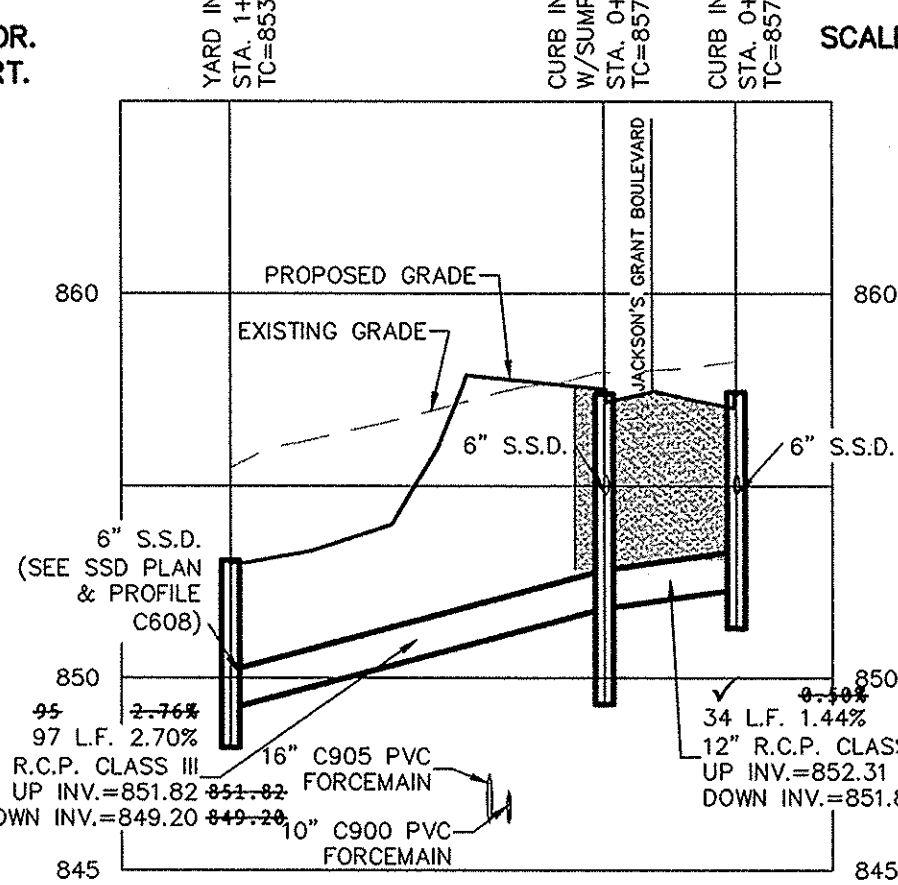
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1"=5' VERT.



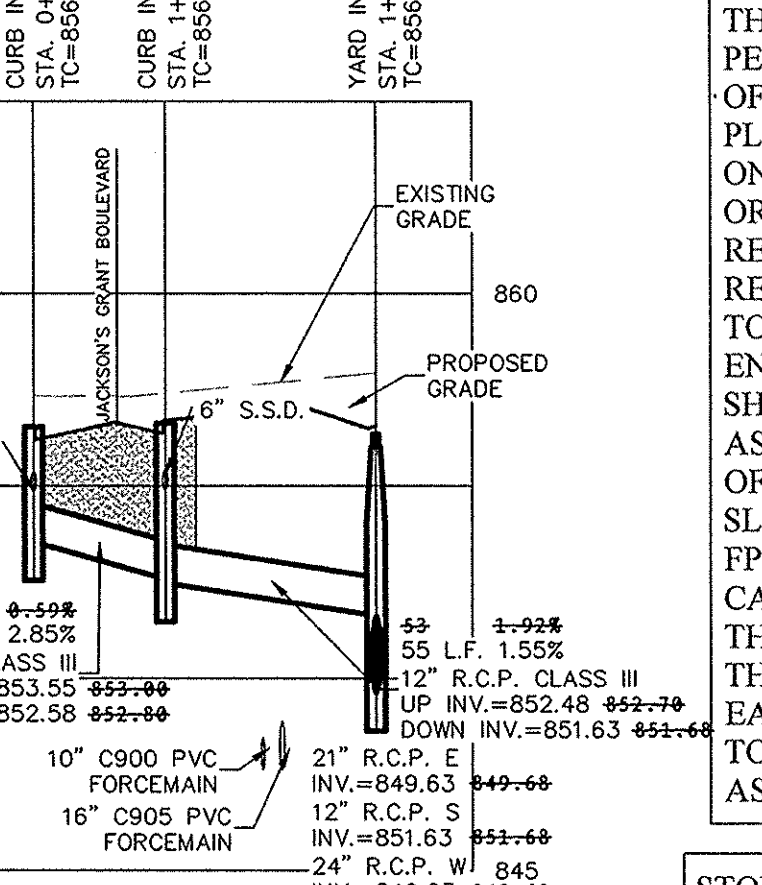
Know what's below.  
Call before you dig.



SCALE: 1"=50' HOR.  
1"=5' VERT.



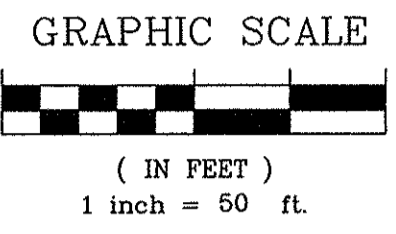
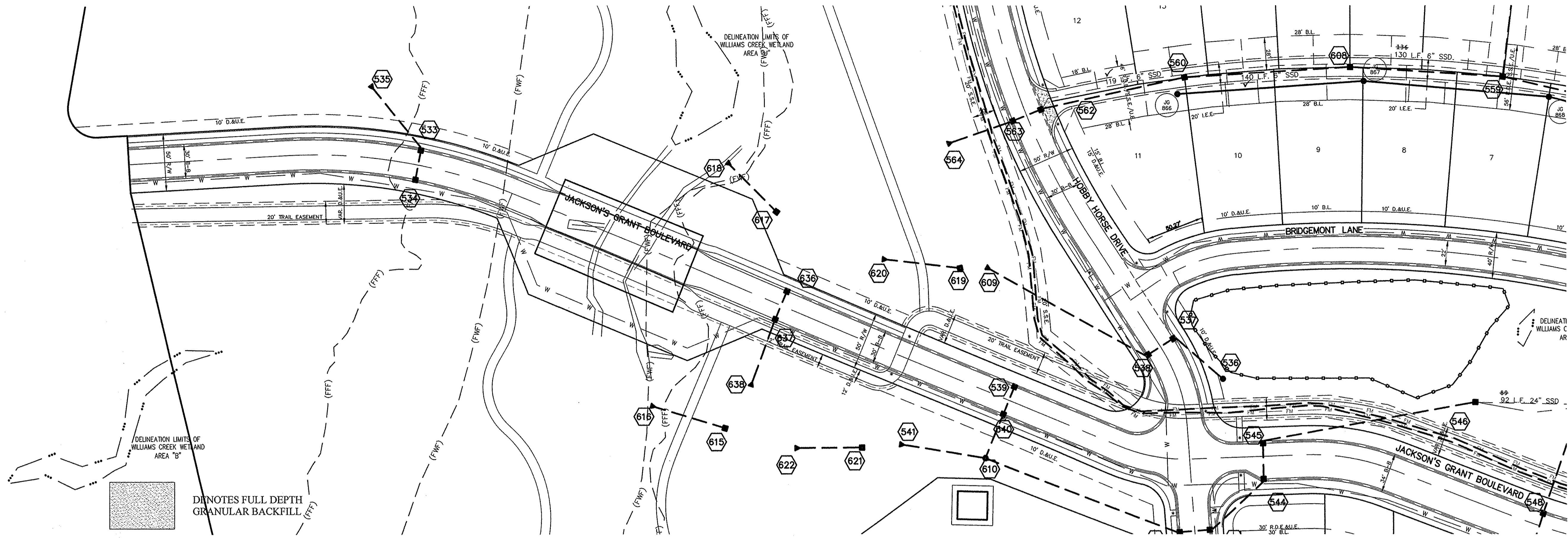
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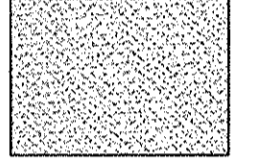
STORM SYSTEM  
STORM SEWERS FOR THIS DEVELOPMENT WILL BE PUBLIC.



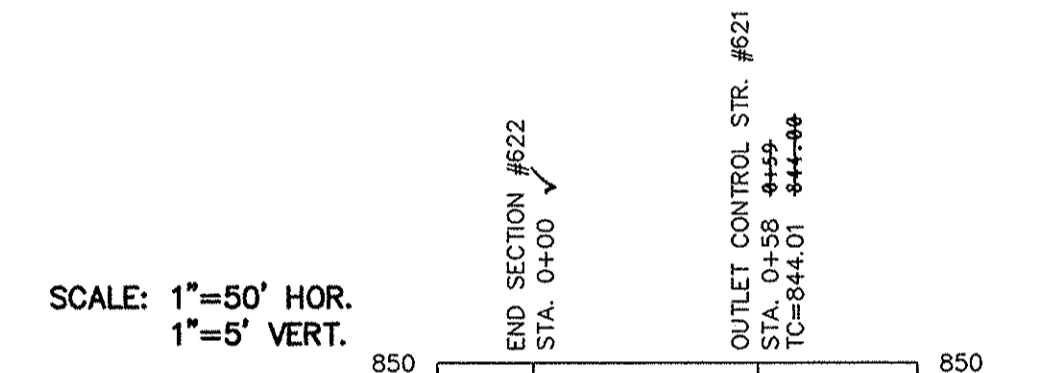
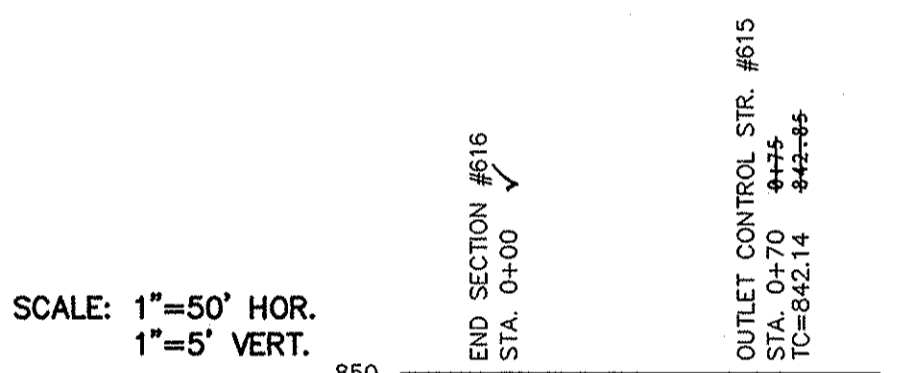
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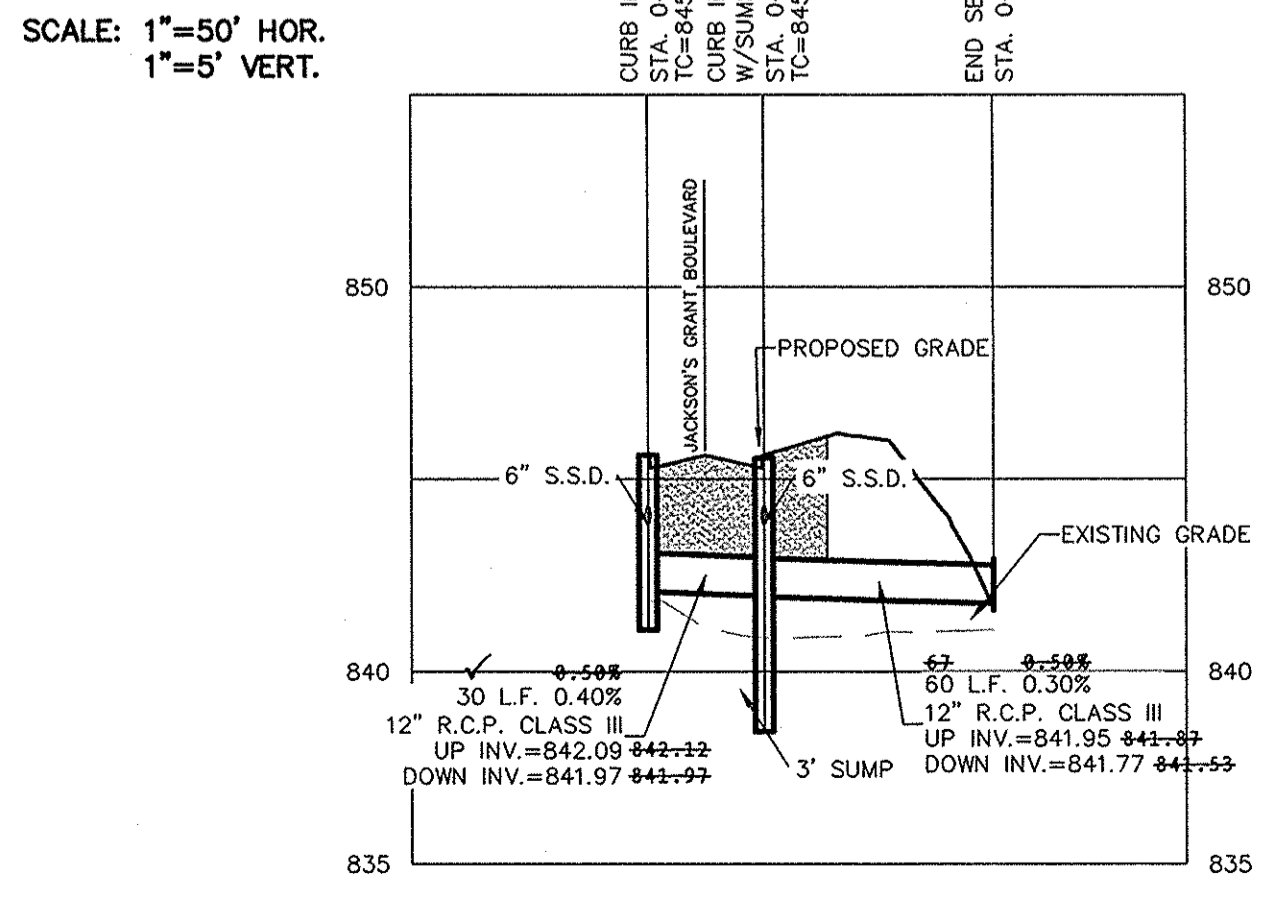
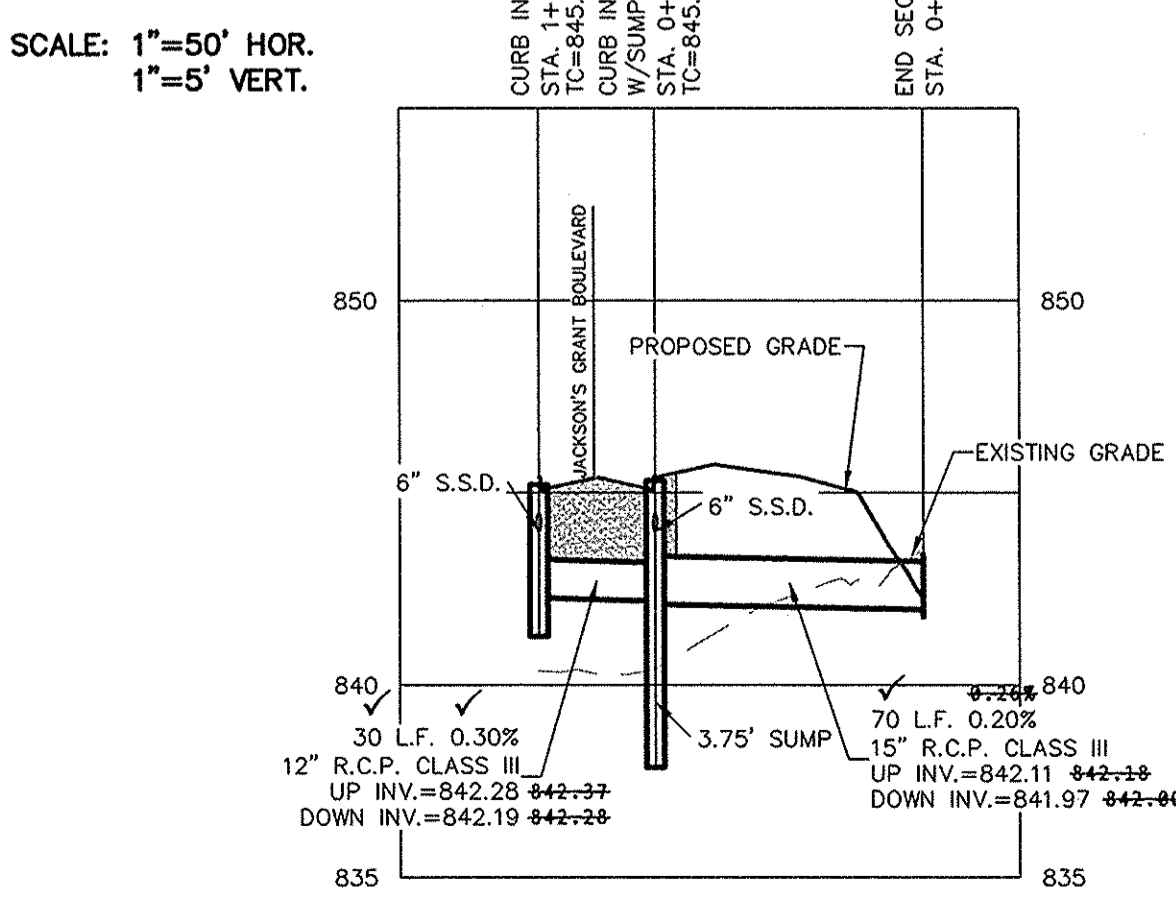
DI NOTES FULL DEPTH GRANULAR BACKFILL



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Entry Date: 2017

Entered By: SLH



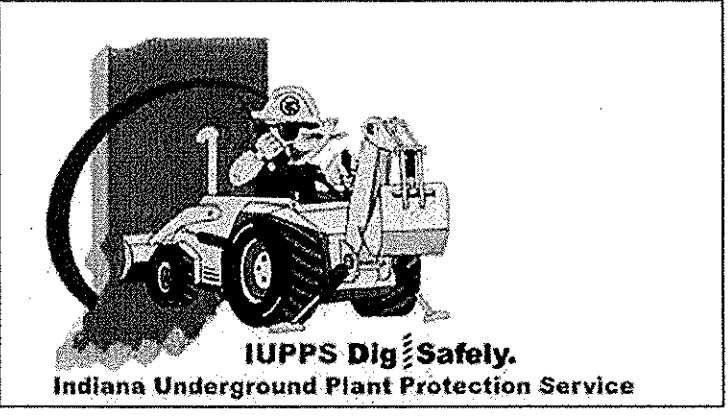
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STORM SYSTEM  
STORM SEWERS FOR THIS DEVELOPMENT WILL BE PUBLIC.



Know what's below.  
Call before you dig.



# RECORD DRAWING

Dennis D. Olmstead  
Registered Land Surveyor  
No. 900012



BY	JSM
REVISIONS	
DATE	
MARK	
UPDATED OUTLET CTRL. TC'S	03/28/15
REMOVED PER ENGINEERING COMMENTS	03/28/15
REVISOR	JSM
LAYOUT PER CLIENT REQUEST	03/17/15
AS-BUILT	03/17/15

DAVID J. STOEPPELWERTH  
REGISTERED PROFESSIONAL ENGINEER  
No. 19358  
STATE OF INDIANA

THIS DRAWING IS NOT INTENDED TO BE REPRESENTED AS A RETRACEMENT OR BOUNDARY LOCATION FOR A SURVEY OR A SURVEYOR LOCATION REPORT.

CERTIFIED: 03/21/14  
David J. Stoepfelwerth

**STOEPPELWERTH**

ALWAYS ON

796 East 10th Street, Fishers, IN 46038-2505  
phone: 317.849.5925 fax: 317.849.5942

STORM PLAN & PROFILES

JACKSON'S GRANT SECTION 1B

HAMILTON COUNTY, INDIANA

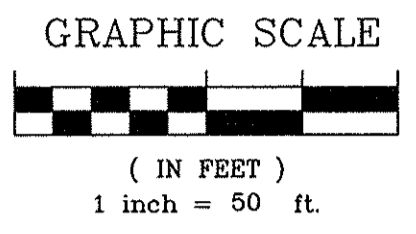
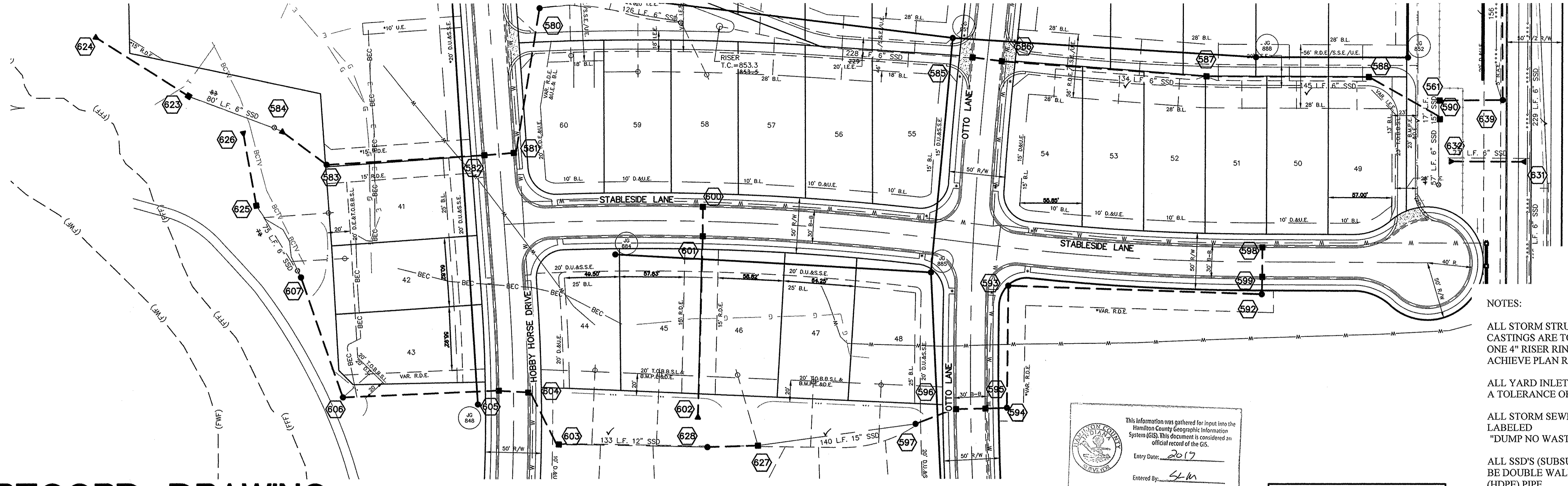
CARMEL

DRAWN BY: JSM CHECKED BY: BAH

SHEET NO. C602A

60160SIL-51B

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April 18, 2016 7:40:45 AM / gmyers  
April 18, 2016 8:07:10 AM / Greg Myers



BY	JSM	REVISIONS
DATE	08/22/14	REVISED PER TAG COMMENTS
MARK		
DATE	07/26/15	UPDATED OUTLET CTRL. TO'S
DATE	06/25/15	REVISION PER ENGINEERING COMMENTS
DATE	07/12/15	REVISION TO ACCOMMODATE FUTURE DEVELOPMENT
DATE	04/07/16	AS-BUILT

DAVID J. STOEPPELWERTH  
 No. 19358  
 STATE OF INDIANA  
 PROFESSIONAL ENGINEER

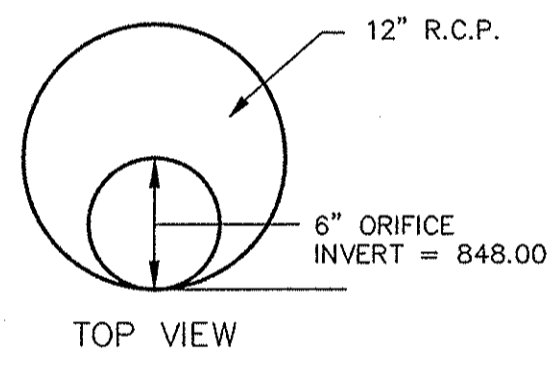
THIS DRAWING IS NOT INTENDED TO BE REPRESENTED AS A RETRACEMENT OR ORIGINAL BOUNDARY SURVEY. A ROUTING REPORT OR A SURVEYOR LOCATION REPORT IS REQUIRED.

CERTIFIED: 03/21/14  
 David J. Stoepfelwerth

ALWAYS ON  
 7965 East Todd Street, Fishers, IN 46038-2955  
 phone: 317.849.5755 fax: 317.849.5942

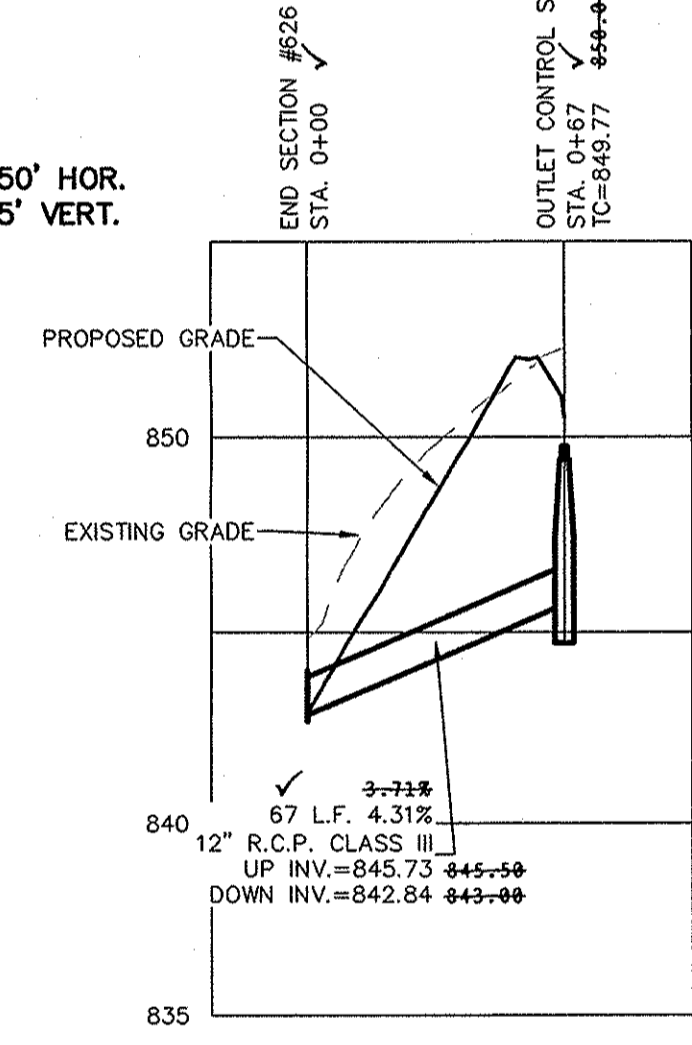
# RECORD DRAWING

Dennis D. Olmstead  
 Registered Land Surveyor  
 No. 900012

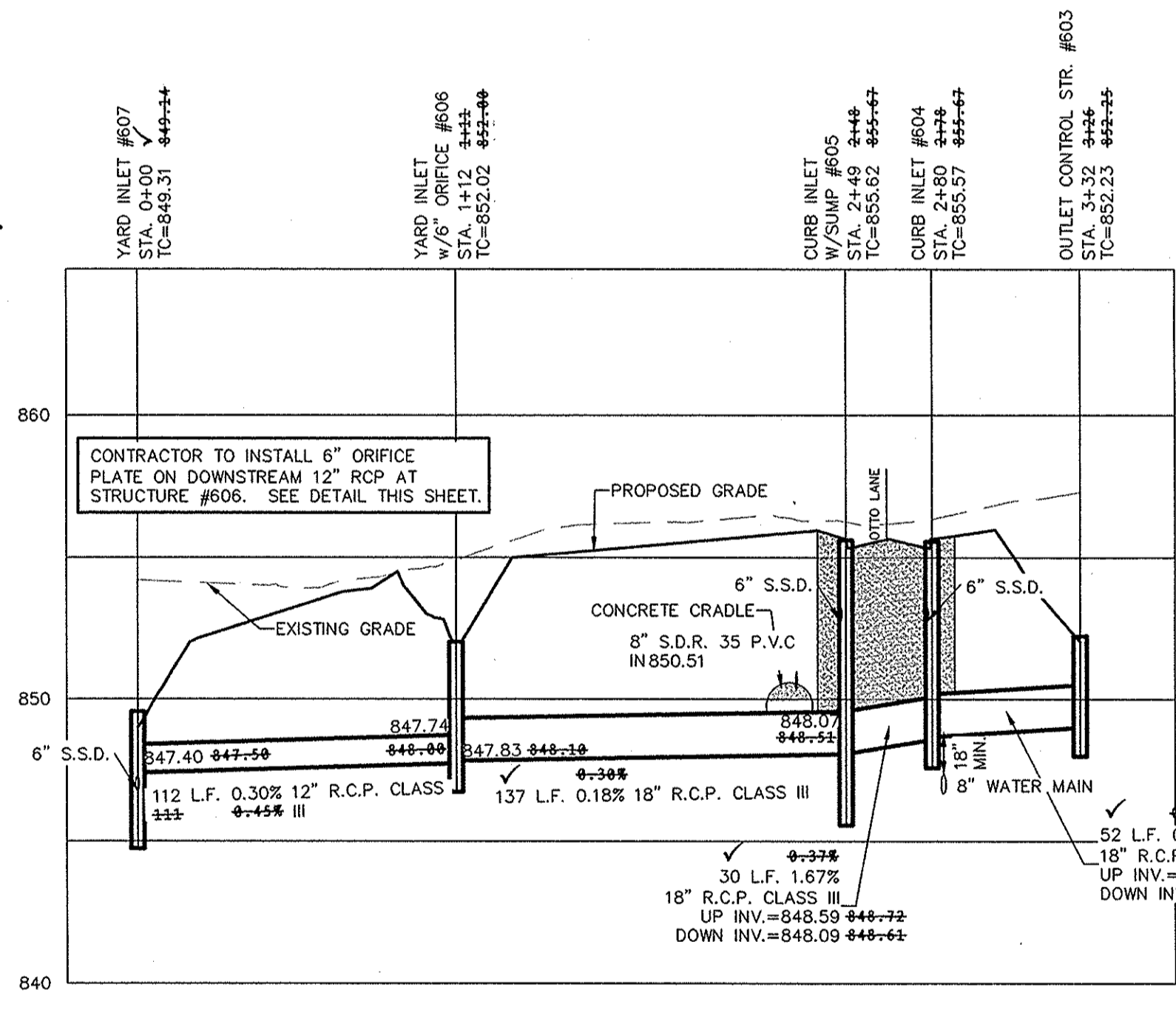


ORIFICE PLATE DETAIL  
 STR. #606  
 NOT-TO-SCALE

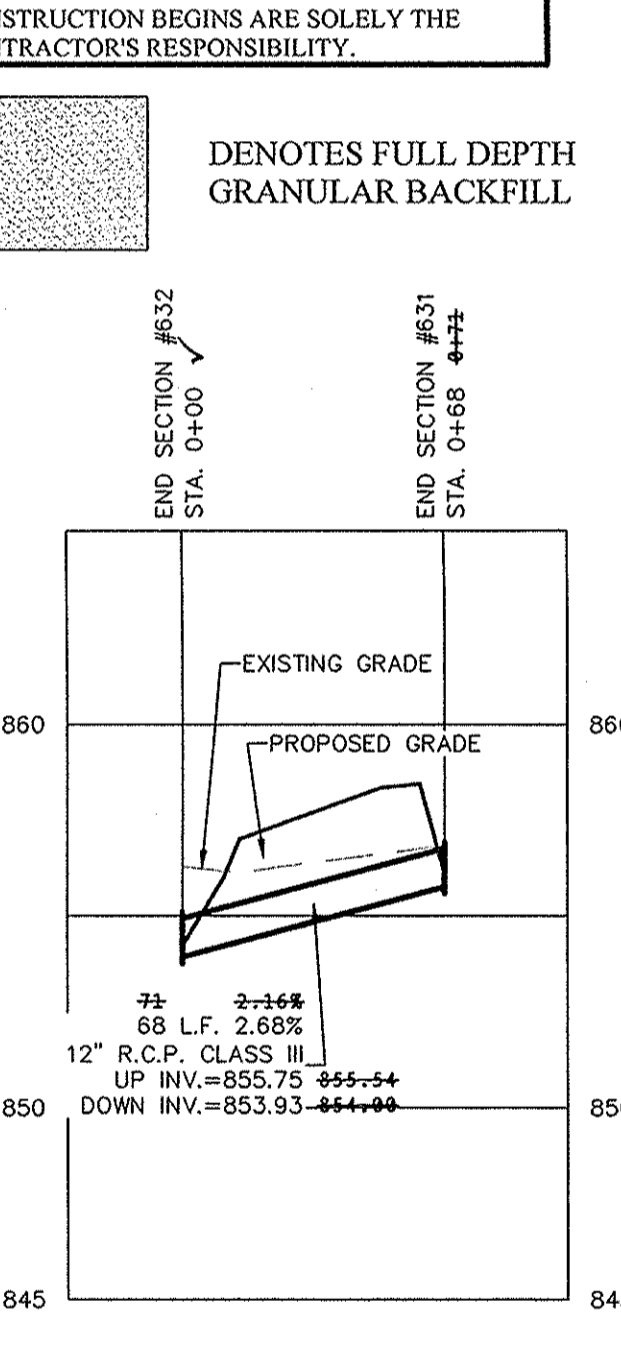
SCALE: 1"=50' HOR.  
 1"=5' VERT.



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STORM SYSTEM  
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Know what's below.  
 Call before you dig.



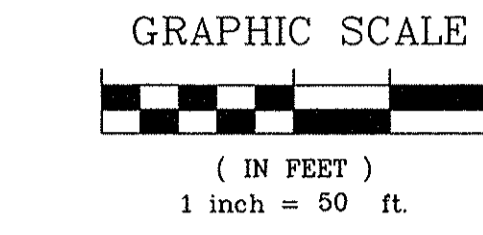
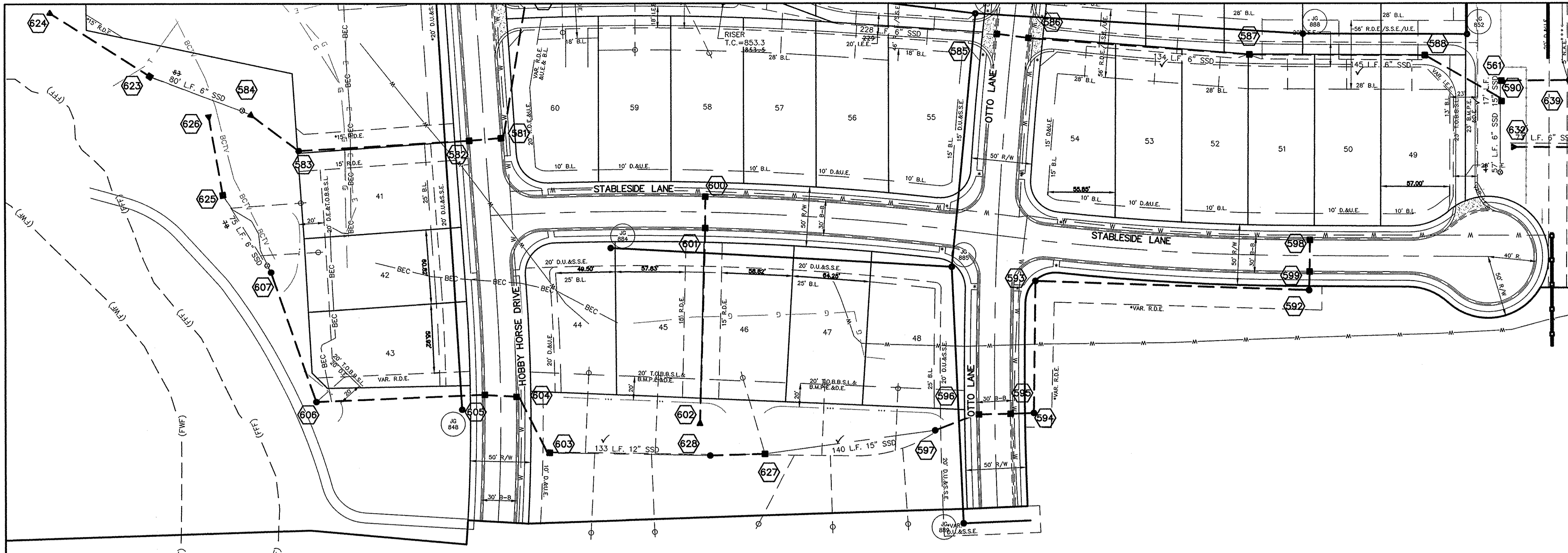
IUPPS Dig Safely  
 Indiana Underground Plant Protection Service

STORM PLAN & PROFILES  
 JACKSONS GRANT  
 SECTION 1B  
 HAMILTON COUNTY, INDIANA  
 CARMEL

DRAWN BY: JSM  
 CHECKED BY: BAH  
 SHEET NO. C603  
 S & A JOB NO. 60160SIL-51B

S:\60160SIL-51B\DWG\C600-Storm Plan & Profiles.dwg - C603  
 April 18, 2016 7:40:45 AM / gmymers  
 April 18, 2016 8:08:34 AM / Greg Myers  
 Plotted / By:





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- ALL SSD'S (SUBSURFACE DRAINS) WILL NEED TO BE DOUBLE WALL SMOOTH BORE PERFORATED (HDPE) PIPE.
- DEBRIS GUARDS ARE TO BE INSTALLED ON ALL OPEN ENDED INLETS.
- FOR STORM STRUCTURE SIZING AND CASTING TABLE SEE DETAIL D-18 ON SHEET C802.
- ALL STORM SEWERS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE RCP CLASS III.
- FOR INSTALLATION OF STORM UNDER CITY STREETS AND COVER REQUIREMENTS, SEE SHEET No. C802 ON THE TRENCH DETAIL.
- THE MINIMUM COVER FROM THE TOP OF THE INSTALLED PAVEMENT TO THE TOP OF THE INSTALLED PIPE SHALL BE THE PAVEMENT SECTION THICKNESS (ALL BITUMINOUS AND AGGREGATE MATERIAL ABOVE THE SUBGRADE) PLUS 1'-0", BUT UNDER NO CIRCUMSTANCES SHALL THE COVER ANY PART OF THE PIPE FROM THE FINAL PAVEMENT ELEVATION TO THE TOP OF THE PIPE BE LESS THAN 2.5 FEET.

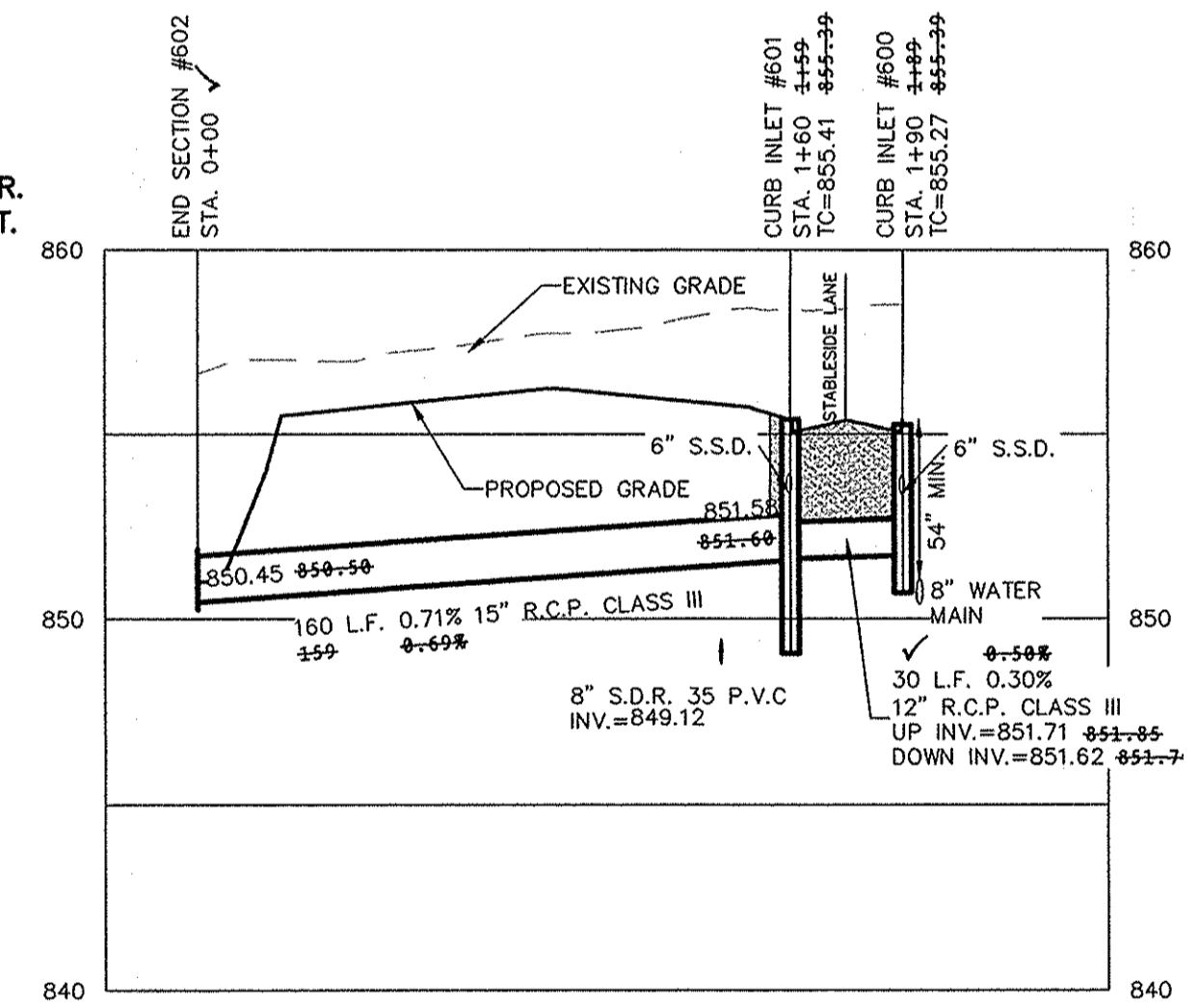
THIS DRAWING IS NOT INTENDED TO BE REPRESENTED AS A RETRACEMENT OR ORIGINAL BOUNDARY SURVEY. A ROUTE REPORT OR A SURVEYOR LOCATION REPORT IS REQUIRED.

CERTIFIED: 03/21/14

*David J. Stoepelwirth*

DAVID J. STOEPELWIRTH  
REGISTERED  
No. 19358  
STATE OF INDIANA  
PROFESSIONAL ENGINEER

SCALE: 1"=50' HOR.  
1"=5' VERT.



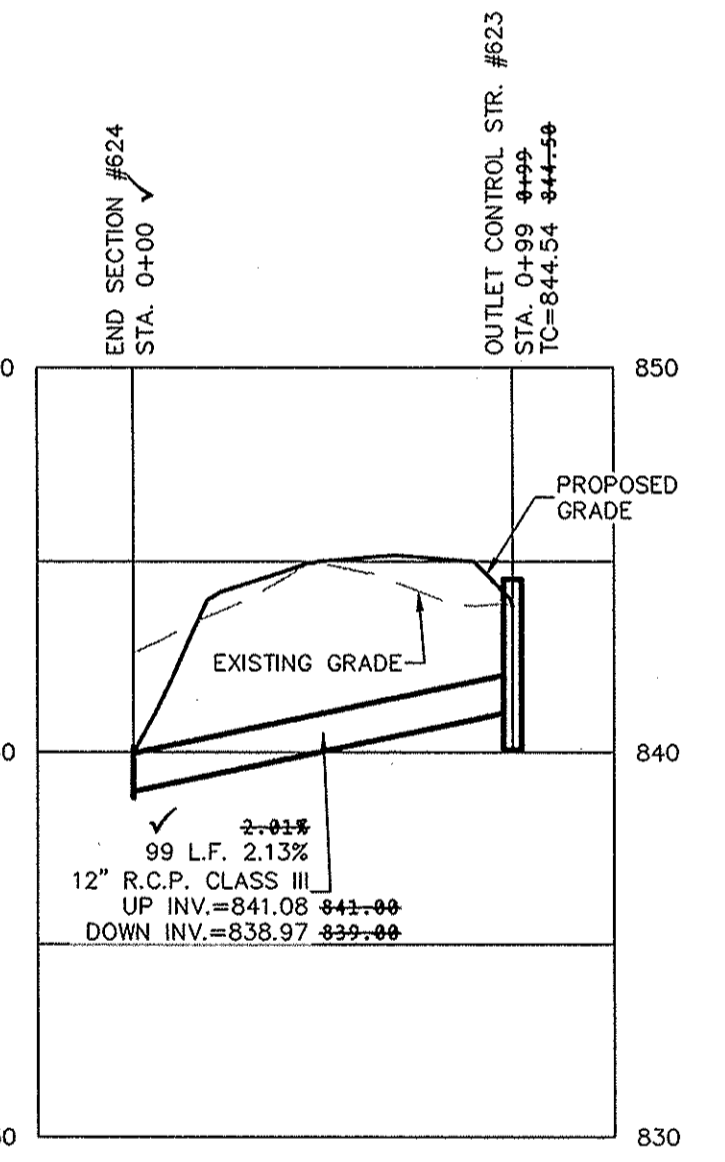
# RECORD DRAWING

Dennis D. Olmstead  
Registered Land Surveyor  
No. 900012

04/11/2016

DENNIS D. OLMSTEAD  
REGISTERED  
No. 900012  
STATE OF INDIANA  
LAND SURVEYOR

SCALE: 1"=50' HOR.  
1"=5' VERT.



CONTRACTOR SHALL VERIFY DEPTHS OF ALL EXISTING ON-SITE UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM THERE IS NOT ANY CONFLICTS WITH OTHER UTILITIES, STORM SEWERS OR STREETS. CONFLICTS AFTER CONSTRUCTION BEGINS ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY.



## STORM SEWER NOTE

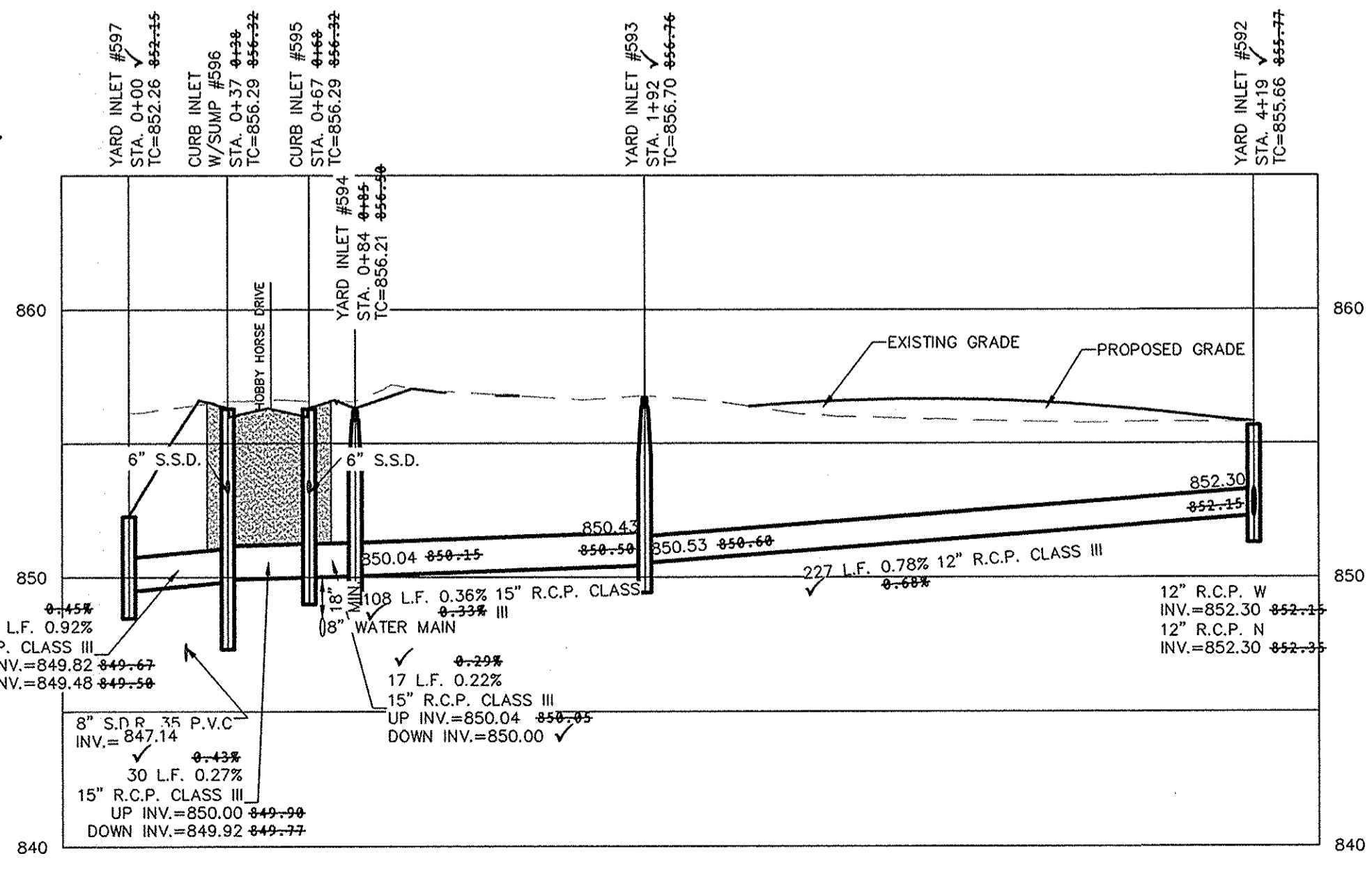
THE STORM SEWER SYSTEM SHALL BE CONSTRUCTED PER DESIGN SPECIFIED AND AS APPROVED BY THE CITY OF CARMEL ON THE FINAL APPROVED CONSTRUCTION PLANS. DEVIATIONS FROM THE APPROVED DESIGN SHALL ONLY BE PERMITTED DUE TO SPECIAL CIRCUMSTANCES OR DIFFICULTY DURING CONSTRUCTION AND WILL REQUIRE PRIOR FIELD APPROVAL FROM A DESIGNATED REPRESENTATIVE OF THE CITY OR CARMEL IN ADDITION TO SUPPLEMENTAL APPROVAL BY THE DESIGN ENGINEER. AN EXPLANATION OF ANY SUCH DEVIATION SHALL BE INCLUDED AS A REQUIREMENT ON AS-BUILT/RECORD DRAWINGS SUBMITTED FOR RELEASE OF PERFORMANCE GUARANTEES. APPROVED DESIGN SLOPES IDENTIFIED AS GENERATING VELOCITIES OF 2.5 FPS OR LESS AND 10 FPS OR GREATER (AT FULL FLOW CAPACITY) SHALL REQUIRE AS-BUILT CERTIFICATION AT THE TIME OF CONSTRUCTION, PRIOR TO BACKFILLING THE PIPE. THE CONTRACTOR IS INSTRUCTED TO AS-BUILT EACH SECTION OF STORM PIPE AS IT IS BEING INSTALLED TO ENSURE COMPLIANCE WITH THE DESIGN PLANS AND AS APPROVED BY THE CITY OF CARMEL.

STORM SYSTEM  
STORM SEWERS FOR THIS DEVELOPMENT WILL BE PUBLIC.

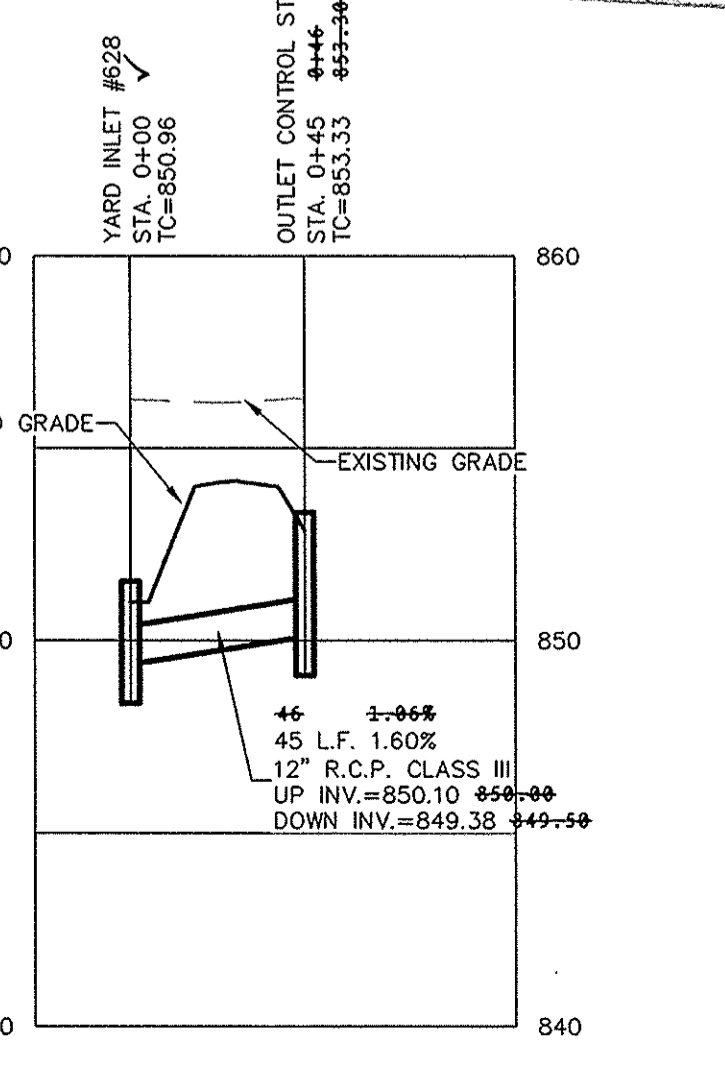
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Entry Date: 2017  
Entered By: SLM

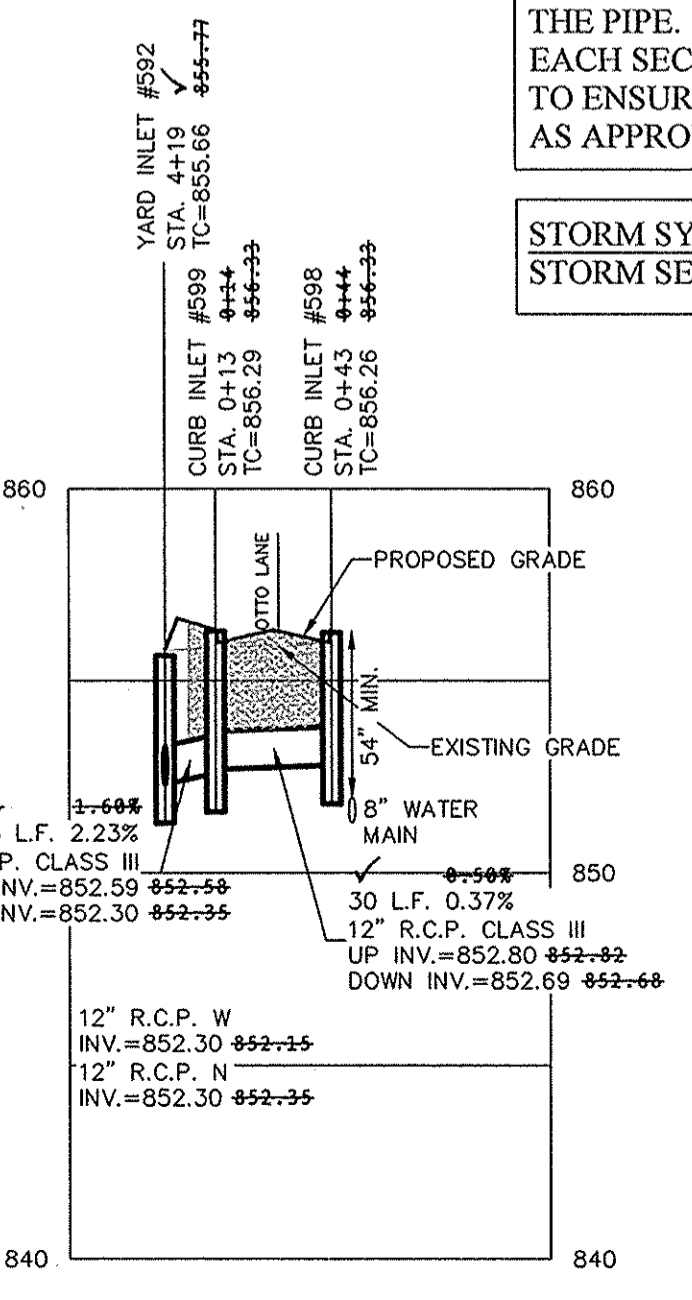
SCALE: 1"=50' HOR.  
1"=5' VERT.



SCALE: 1"=50' HOR.  
1"=5' VERT.



SCALE: 1"=50' HOR.  
1"=5' VERT.



Know what's below.  
Call before you dig.



STORM PLAN & PROFILES

JACKSONS GRANT  
SECTION 1B

HAMILTON COUNTY, INDIANA

CARMEL

ALWAYS ON  
7965 East 106th Street, Fishers, IN 46038-2956  
phone: 317.845.5955 fax: 317.845.5942

DRAWN BY:  
JSM

CHECKED BY:  
BAH

SHEET NO.  
**C604**

S & A JOB NO.  
60160SIL-1B

BY	JSM
DATE	03/21/14
REVISIONS	
ISSD SIZE ON STR. 561 & 615	
REVISIONS	
DATE	03/21/14
MARK	
ASBUILT	03/21/14
REVISED PER SWPPP COMMENTS	03/21/14
REVISED PER SWPPP COMMENTS	03/21/14
ADG	
JSM	
JSM	
BY	

THIS DRAWING IS NOT INTENDED TO BE REPRESENTED AS A RETRACEMENT OR ORIGINAL BOUNDARY SURVEY. A ROUTE REPORT OR A SURVEYOR LOCATION REPORT.

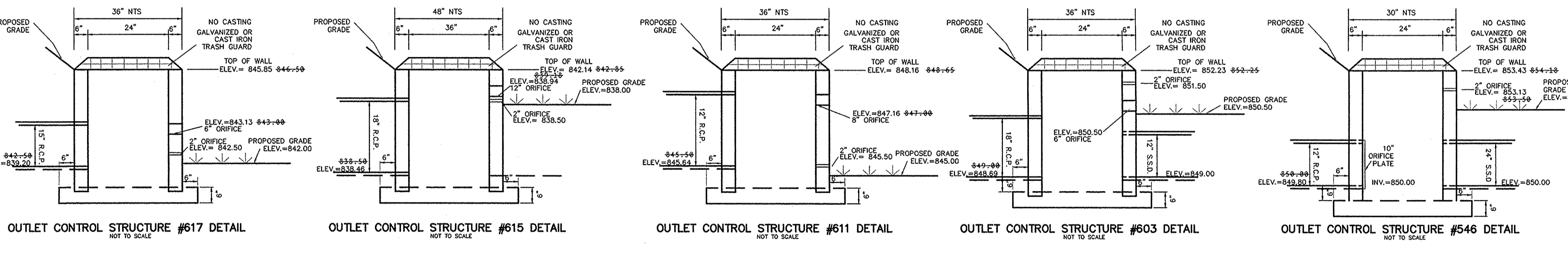
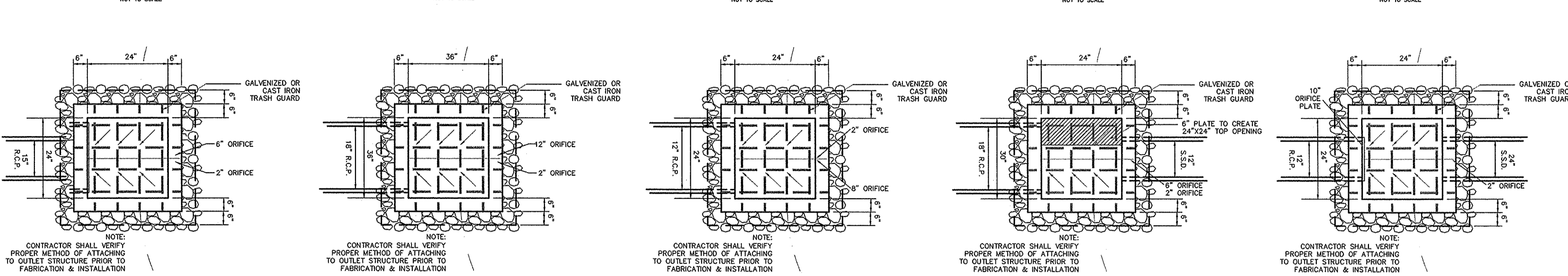
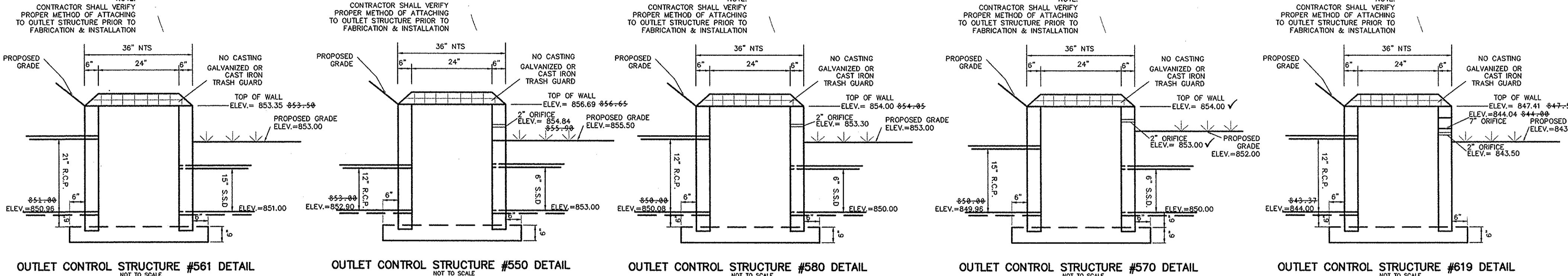
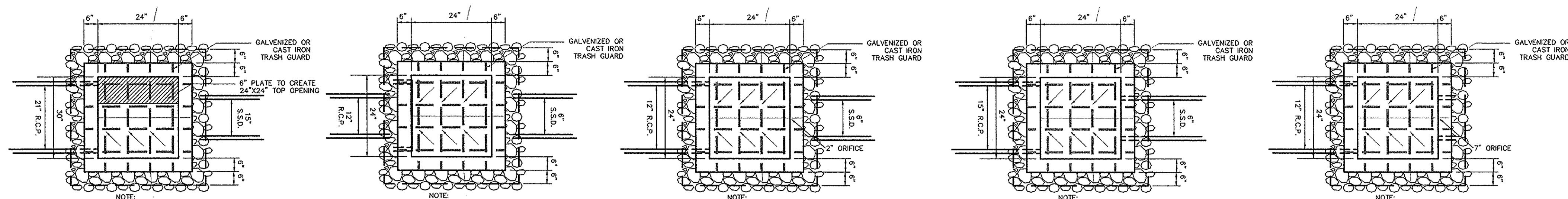
CERTIFIED: 03/21/14

David J. Stappert  
Professional Engineer

**STOEPPELWERTH**  
ALWAYS ON  
796 East 10th Street, Ellettsville, IN 46033-2505  
phone: 317.849.5925 fax: 317.849.5942

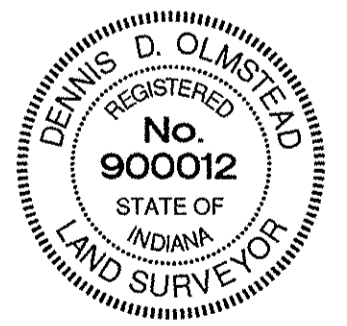
**OUTLET STRUCTURE DETAILS**  
**JACKSONS GRANT**  
**SECTION 1B**  
HAMILTON COUNTY, INDIANA  
CARMEL

DRAWN BY:	JSM	CHECKED BY:	BAH
SHEET NO.	<b>C605</b>		
S & A JOB NO.	60160SIL-31B		

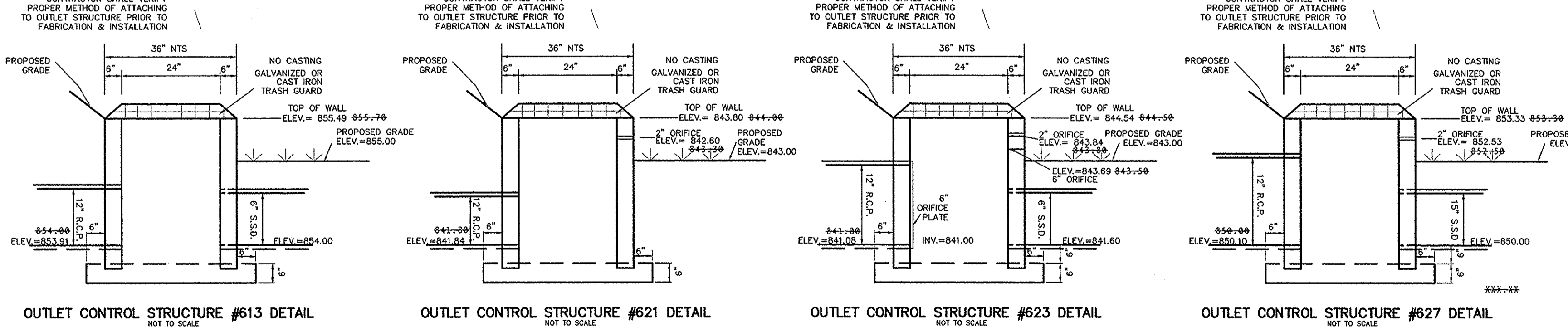
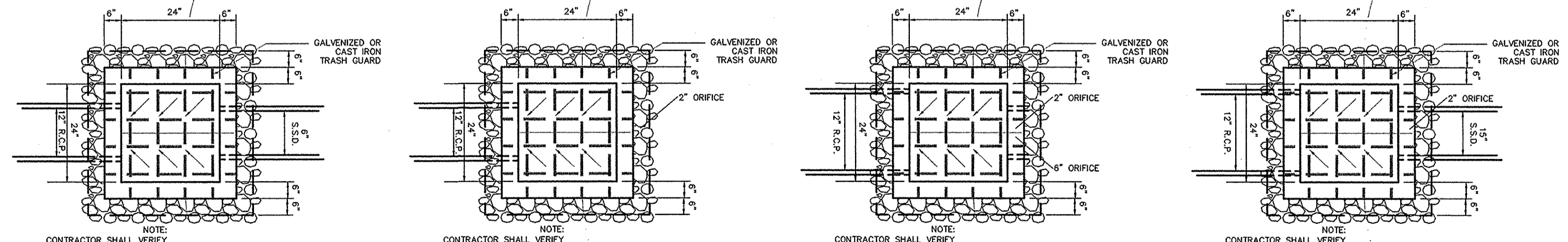


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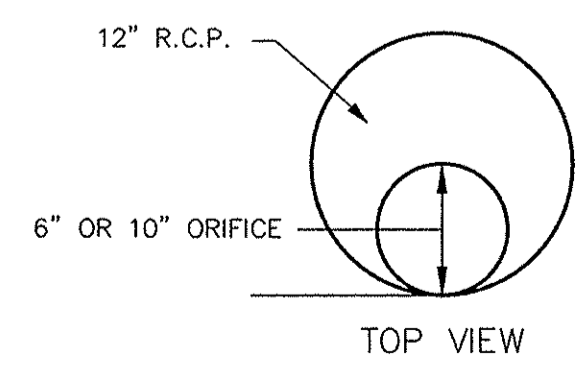
*D. D. Olmstead*  
Dennis D. Olmstead  
Registered Land Surveyor  
No. 900012



04/11/2016



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Entry Date: April 2017  
Entered By: *SLM*



S:\60160SIL-S1B\DWG\C605-Storm Plan & Profiles.dwg - C605  
April 18, 2016 7:40:45 AM / gmyers  
April 18, 2016 8:09:59 AM / Greg Myers  
Plotter / By:

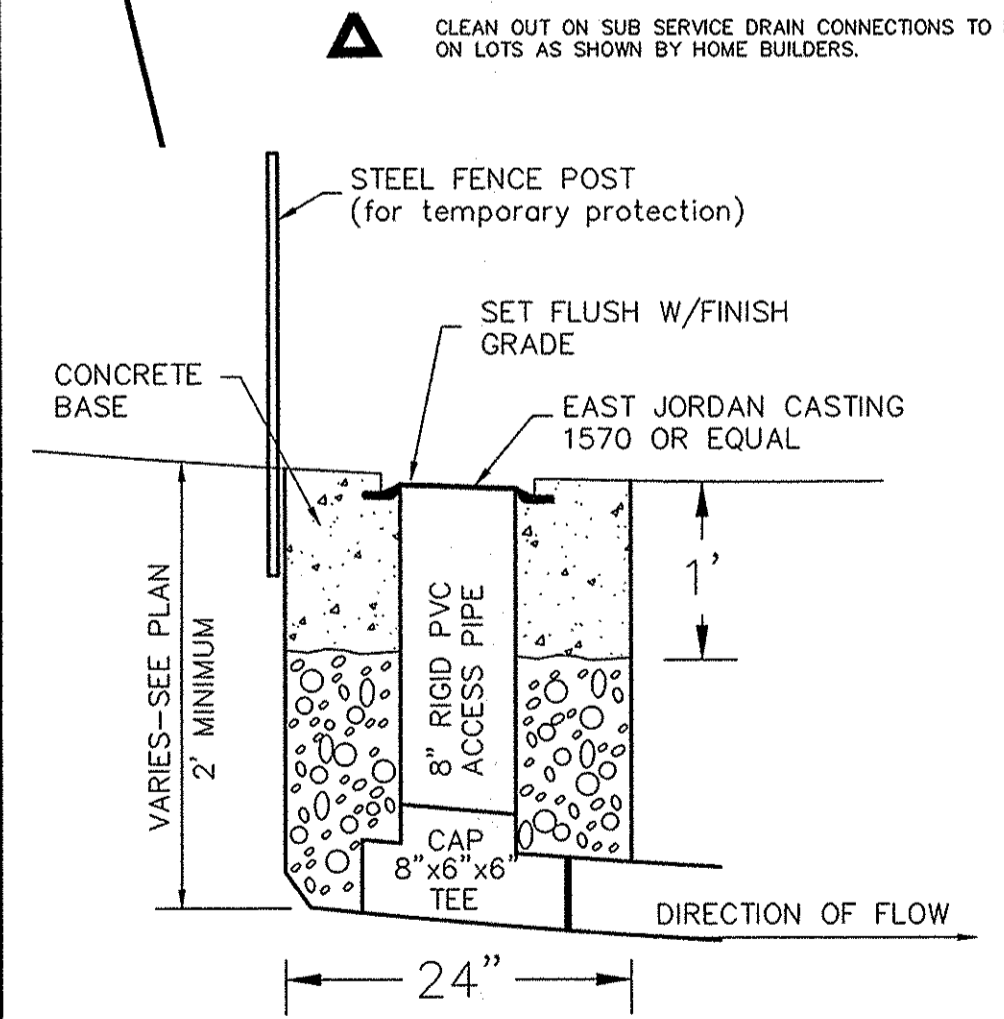
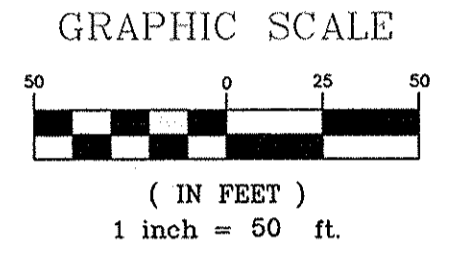
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 Entered By: SLM

REGISTERED PROFESSIONAL ENGINEER  
 No. 19358  
 STATE OF INDIANA  
 David J. Stoepelwerth

**STOEPPELWERTH**  
 ALWAYS ON  
 7905 East 10th Street, Fishers, IN 46038-2505  
 phone: 317.849.5905 fax: 317.849.5942

SSD & SUMP PLAN  
 JACKSON'S GRANT SECTION 1B

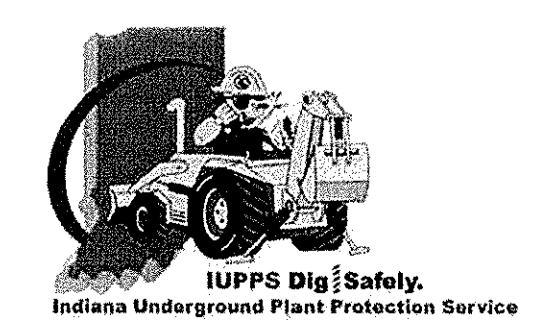
DRAWN BY: JSM CHECKED BY: BAH  
 SHEET NO. C606  
 5 x 4 3/8" NO. 60160SIL-S1B



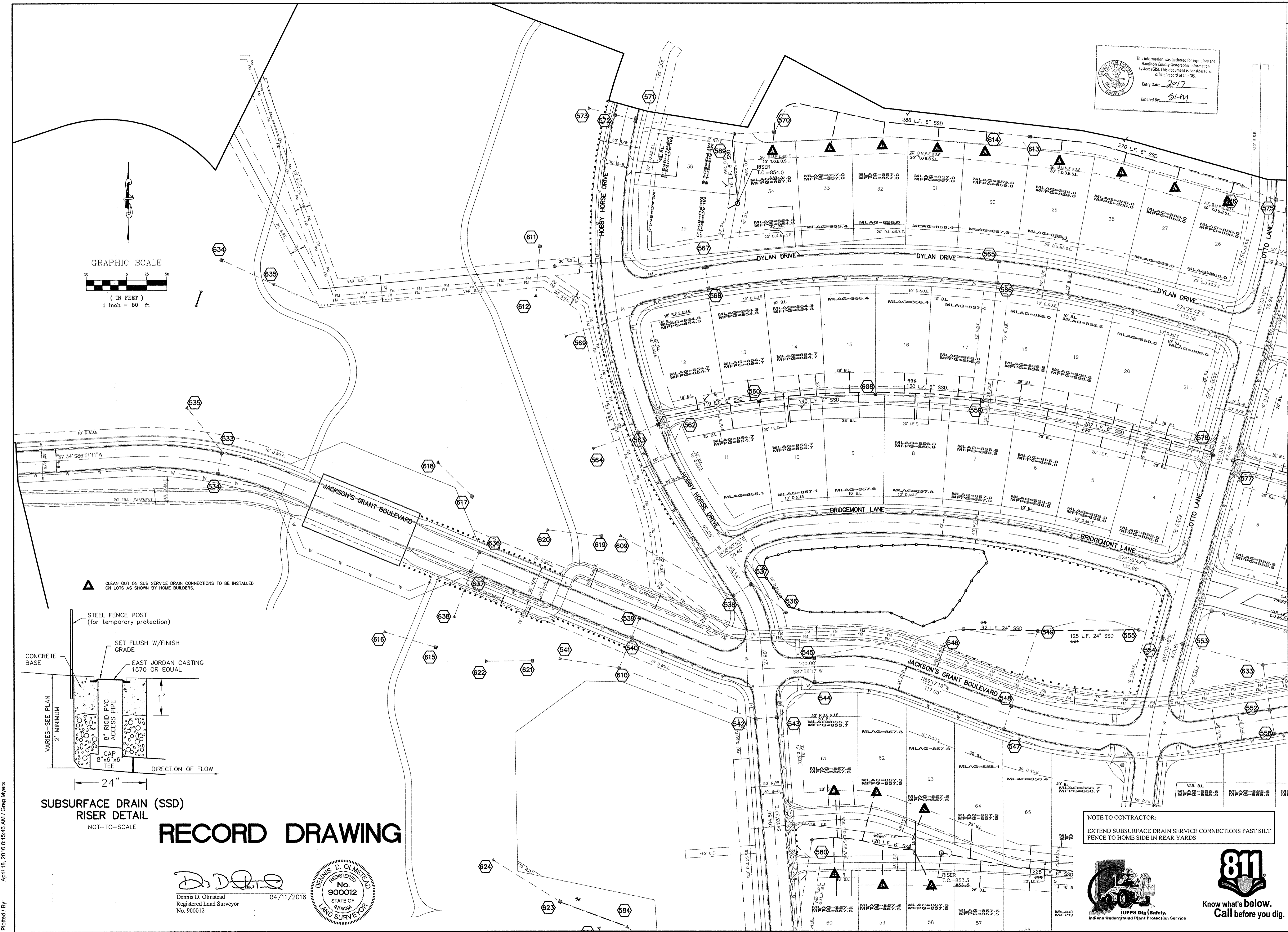
**RECORD DRAWING**

Dennis D. Olmstead  
 Registered Land Surveyor  
 No. 900012  
 STATE OF INDIANA  
 LAND SURVEYOR

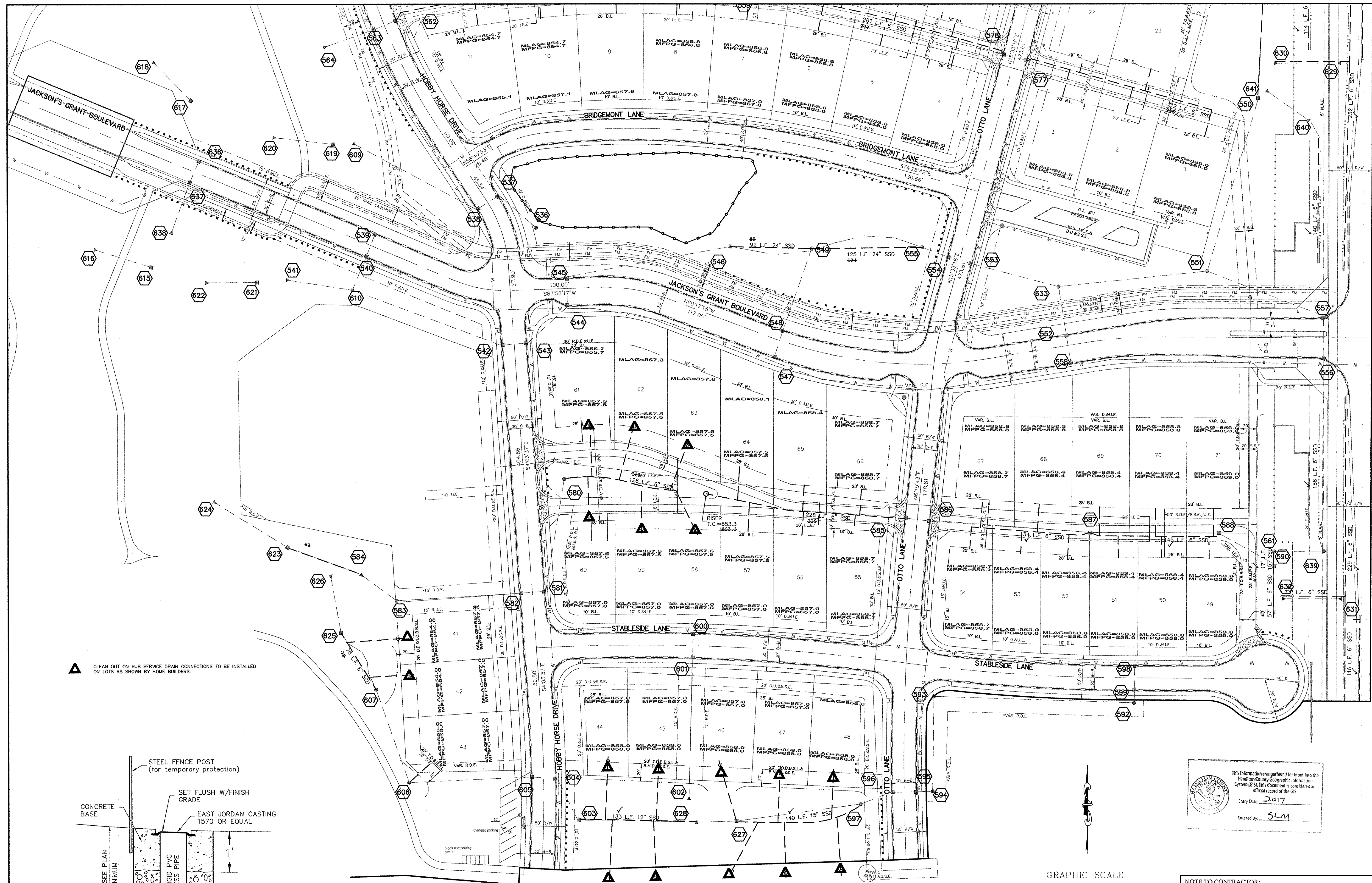
NOTE TO CONTRACTOR:  
 EXTEND SUBSURFACE DRAIN SERVICE CONNECTIONS PAST SILT FENCE TO HOME SIDE IN REAR YARDS



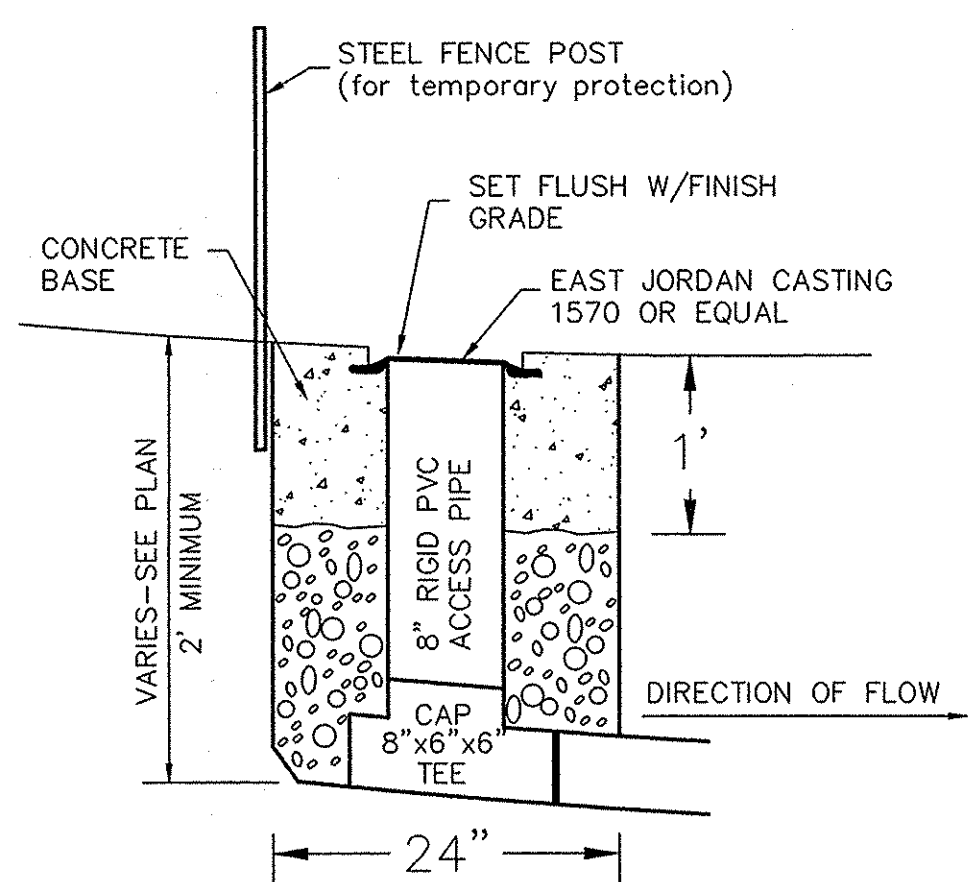
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 Modified / By: April 14, 2016 3:29:40 PM / gmyers  
 Plotted / By: April 18, 2016 8:15:46 AM / Greg Myers



File Name: S:\6016051L-S1B\DWG\C606-Sump Plans.dwg - C607  
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 Plotted / By: April 18, 2016 8:15:59 AM / Greg Myers



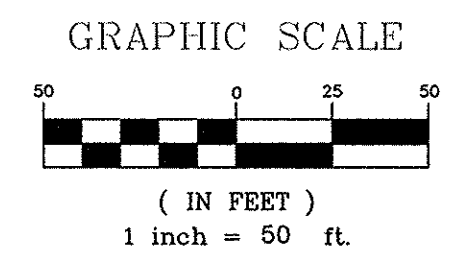
▲ CLEAN OUT ON SUB SERVICE DRAIN CONNECTIONS TO BE INSTALLED ON LOTS AS SHOWN BY HOME BUILDERS.



**SUBSURFACE DRAIN (SSD)  
 RISER DETAIL**  
 NOT-TO-SCALE

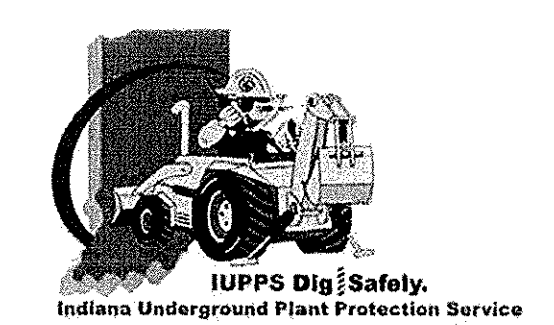
# RECORD DRAWING

*D. D. O.*  
 Dennis D. Olmstead  
 Registered Land Surveyor  
 No. 900012  
 04/11/2016  
 REGISTERED  
 No. 900012  
 STATE OF  
 INDIANA  
 LAND SURVEYOR



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 Entry Date: 2017  
 Entered By: JLM

**NOTE TO CONTRACTOR:**  
 EXTEND SUBSURFACE DRAIN SERVICE CONNECTIONS PAST SILT FENCE TO HOME SIDE IN REAR YARDS



**811**  
 Know what's below.  
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DATE	MARK	REVISIONS
07/25/14	JSM	REVISED PER TAC COMMENTS
03/27/15	JSM	REVISED PER TAC COMMENTS
04/07/16	ASBULT	AMOD SSD TEXT FOR STR. 550 & REISED SSD LF TO STR 629
04/07/16	GEM	ASBUILT
	BY	

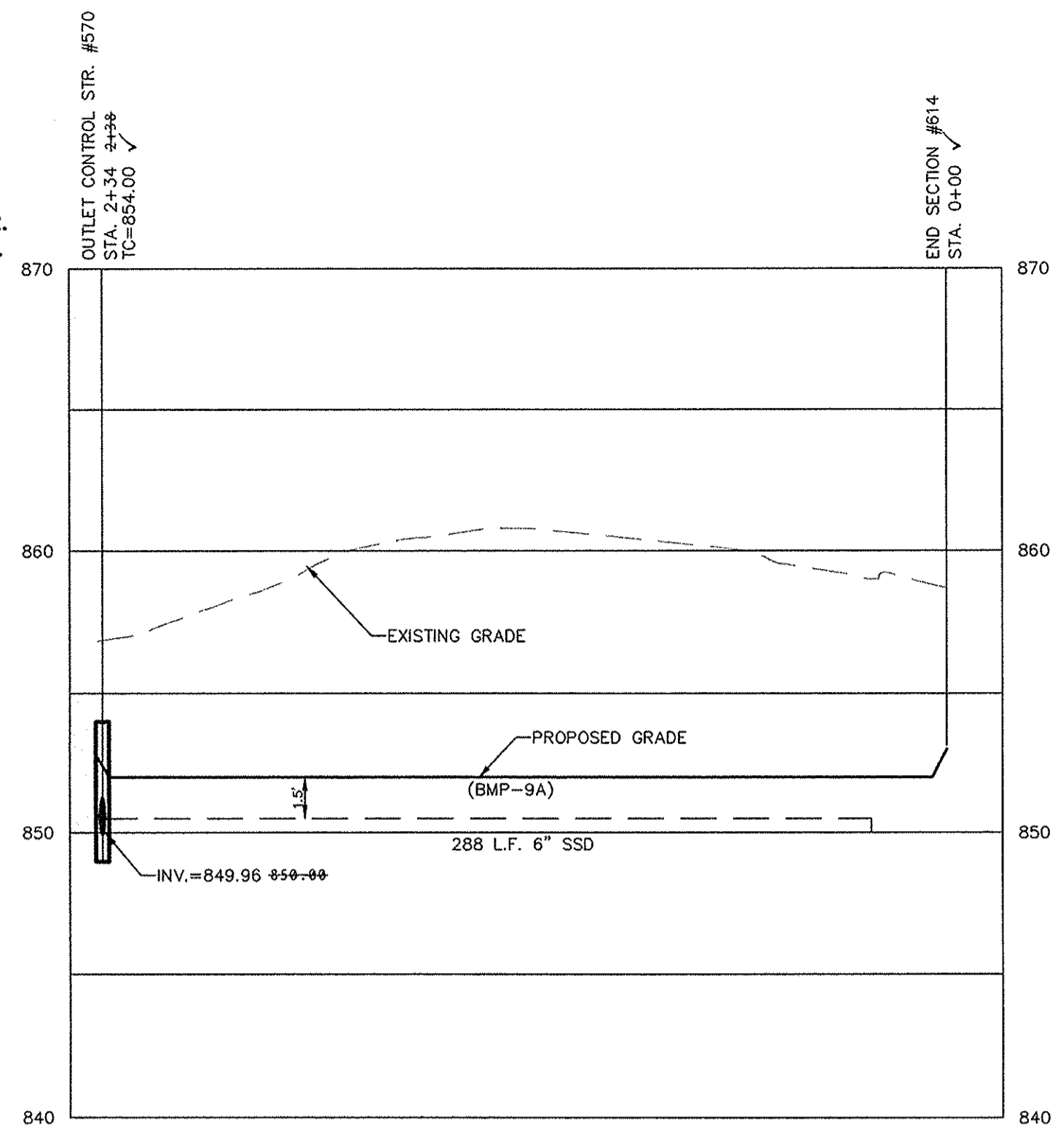
DAVID J. STOEPPELWERTH  
 REGISTERED  
 No. 19358  
 STATE OF  
 INDIANA  
 PROFESSIONAL ENGINEER  
 CERTIFIED: 03/21/14  
*David J. Stoepfelwerth*

**STOEPPELWERTH**  
 ALWAYS ON  
 7965 East 10th Street, Fishers, IN 46038-5005  
 phone: 317.849.5905 fax: 317.849.5942

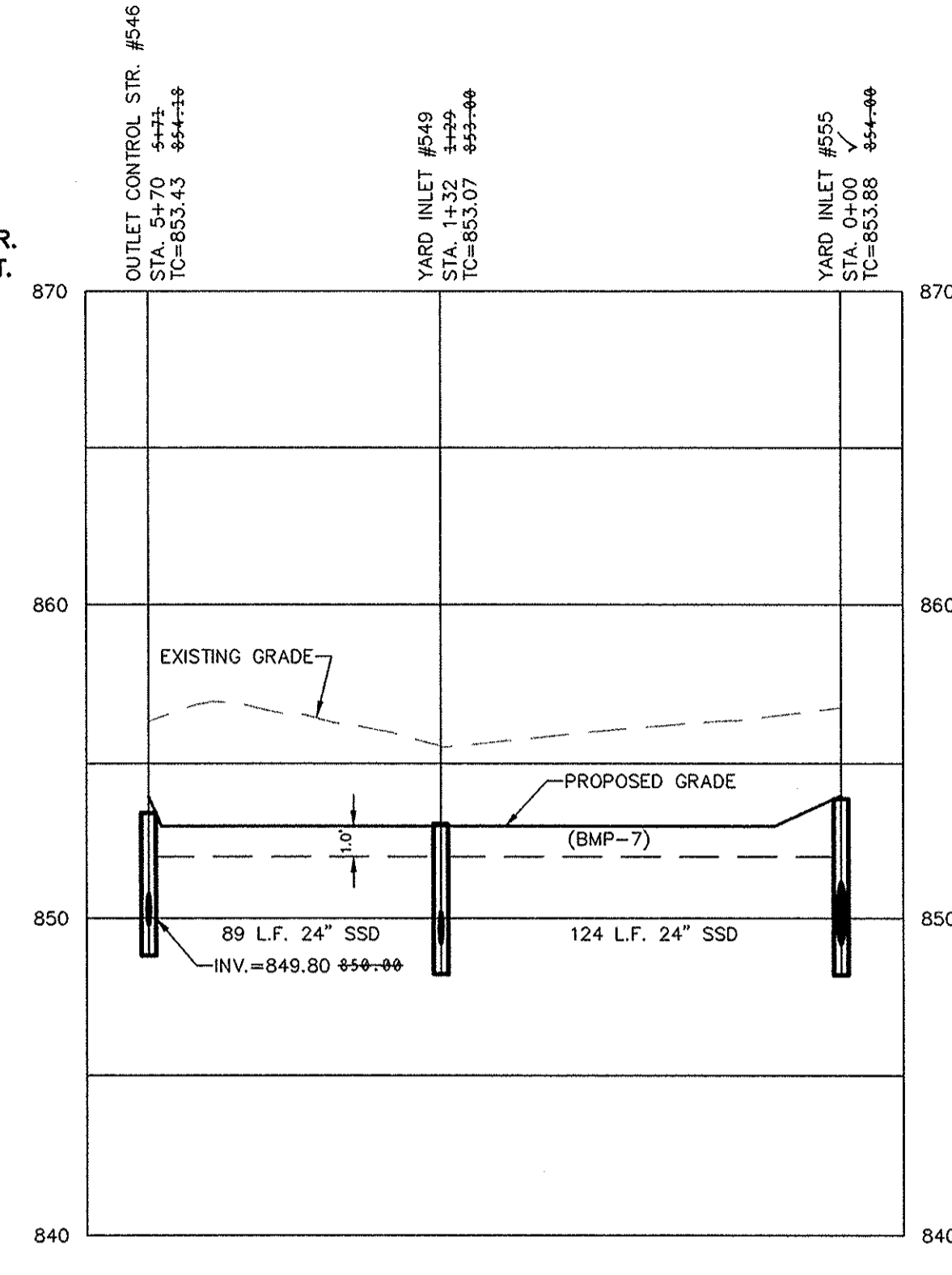
**SSD & SUMP PLAN**  
**JACKSONS GRANT**  
**SECTION 1B**  
 HAMILTON COUNTY, INDIANA  
 CARMEL  
 DRAWN BY: JSM  
 CHECKED BY: BAH  
 SHEET NO. **C607**  
 S & A 400 NO. 6016051L-S1B

S:\60160SIL-S1B\DWG\C600-Storm Plan & Profiles.dwg - C608  
 April 18, 2016 7:40:45 AM / gmyers  
 Modified / By:  
 Plotted / By: April 18, 2016 8:12:08 AM / Greg Myers

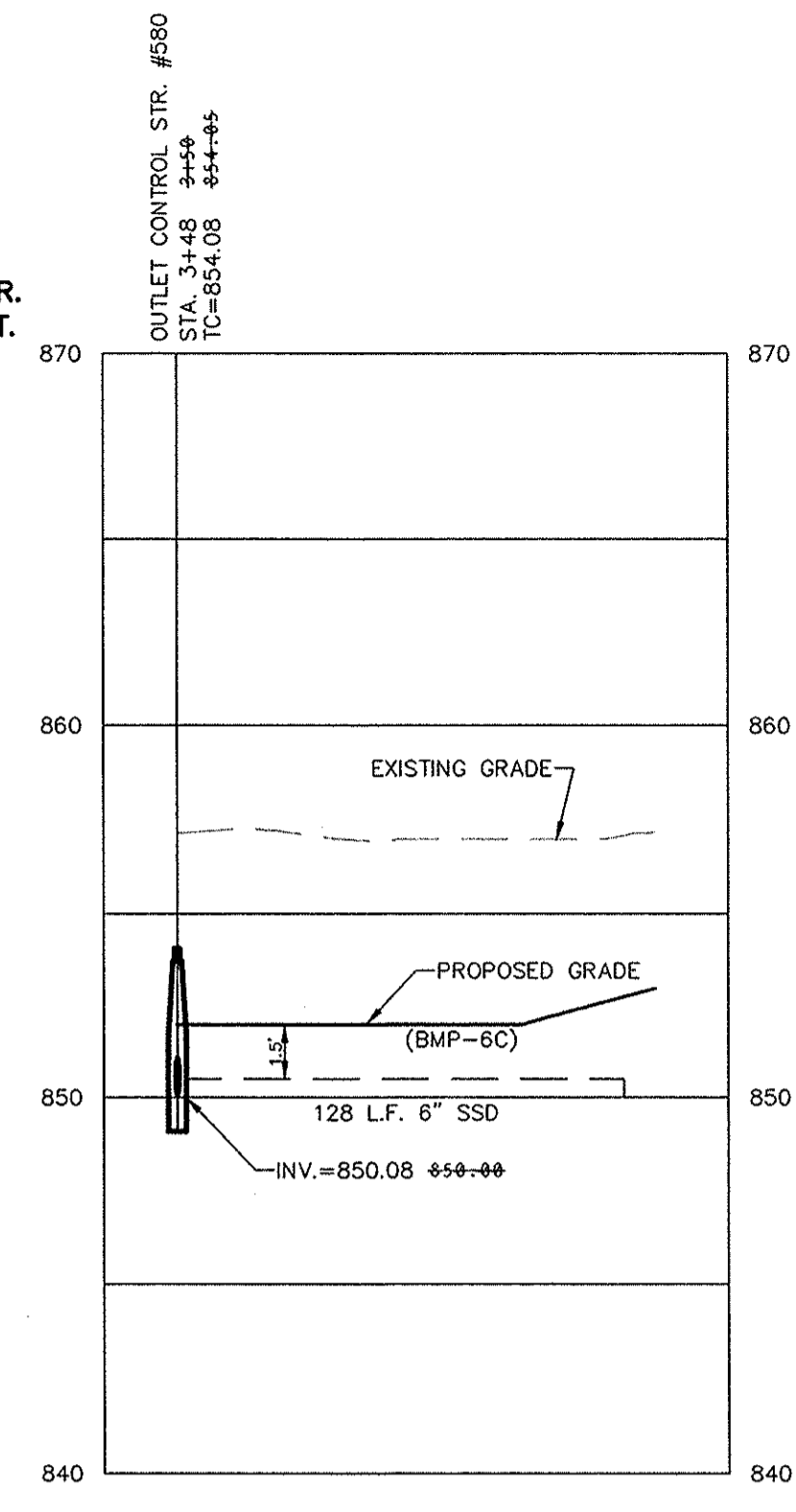
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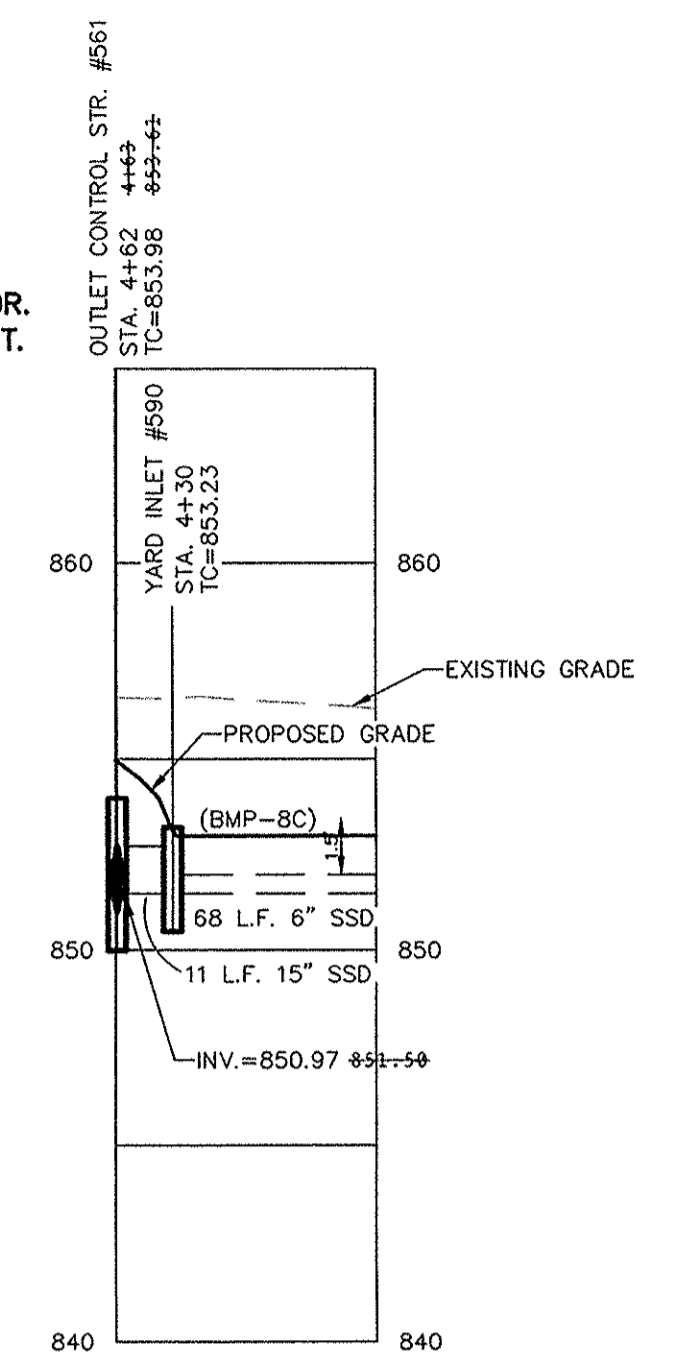
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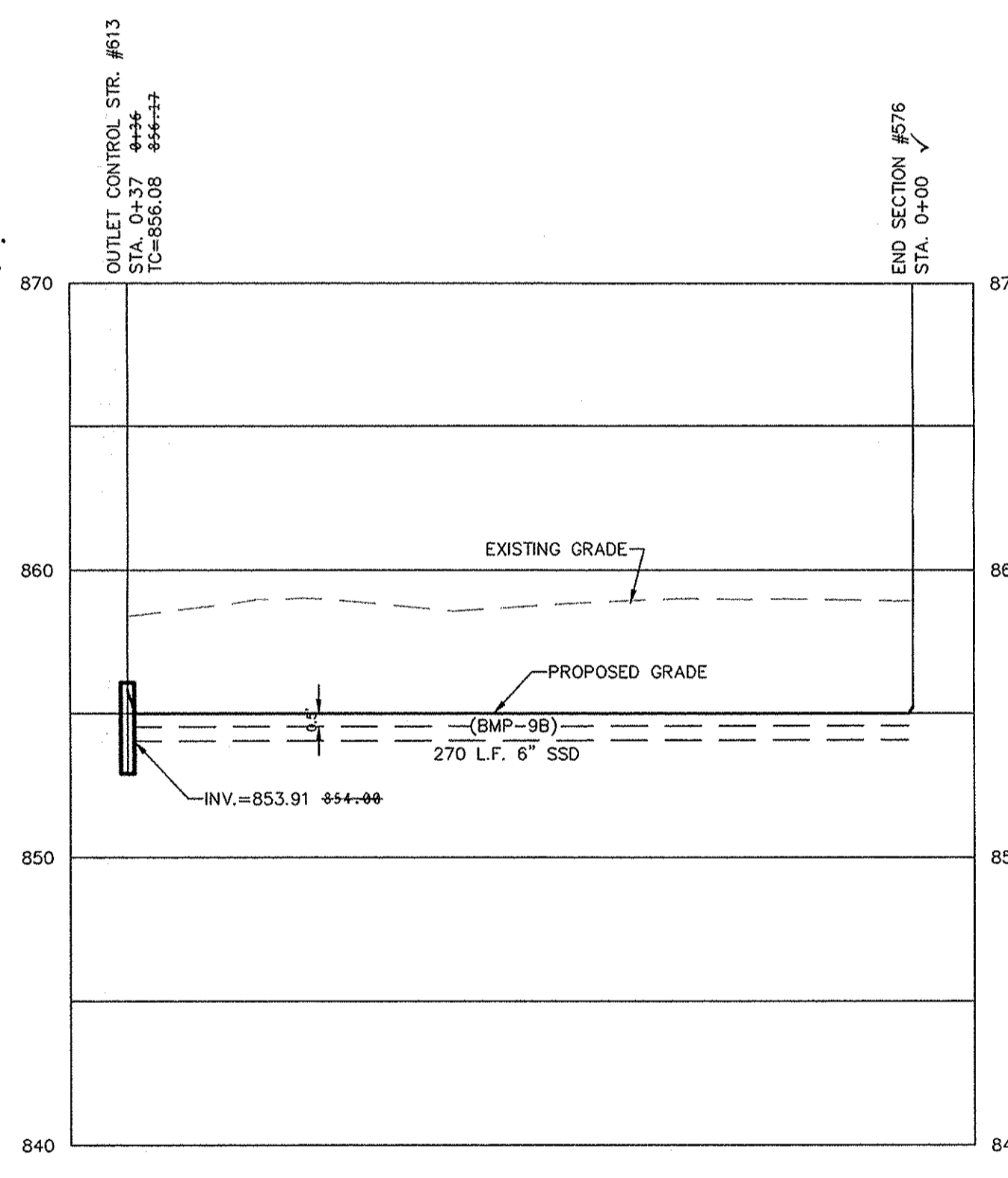
SCALE: 1"=50' HOR.  
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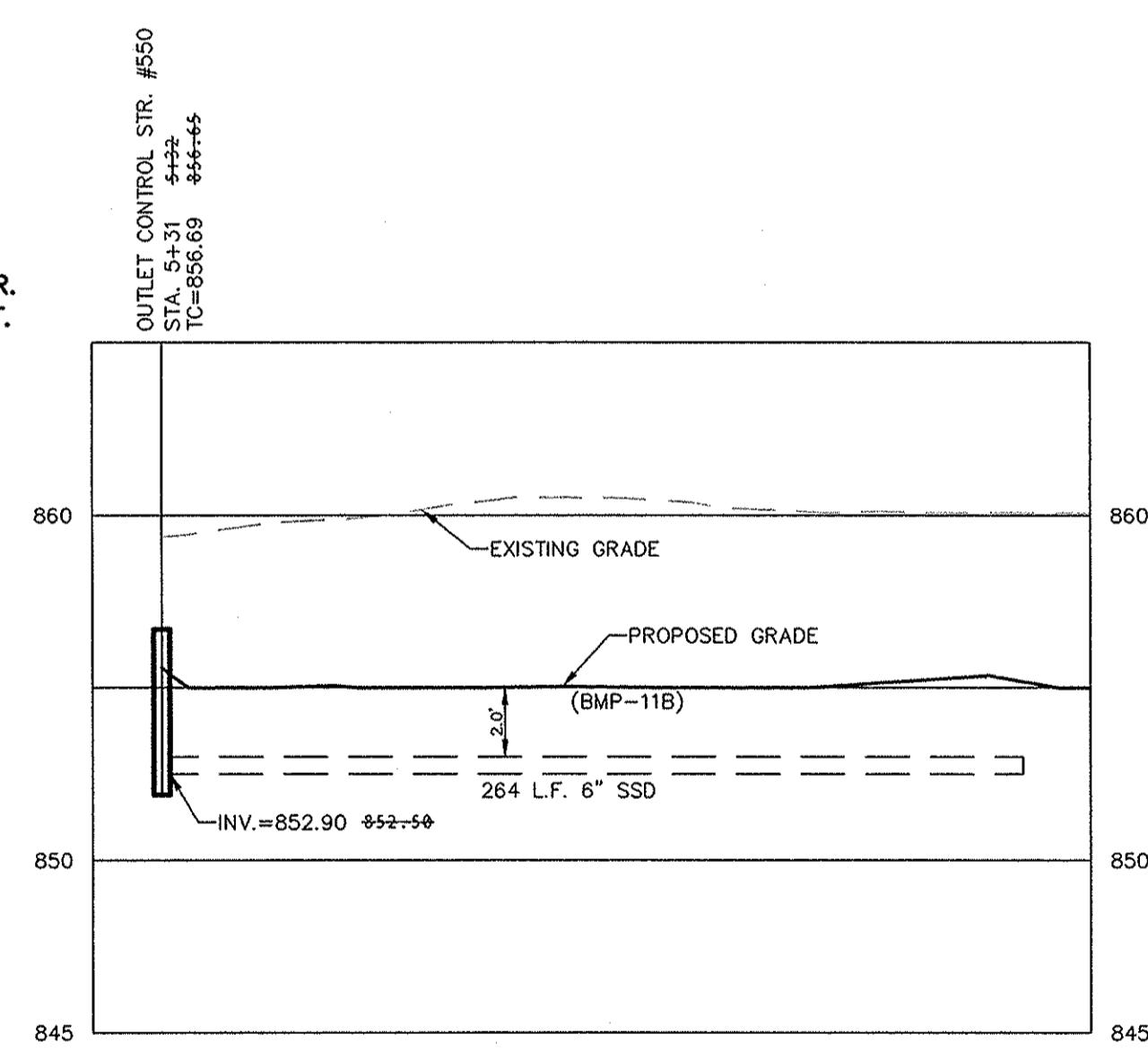
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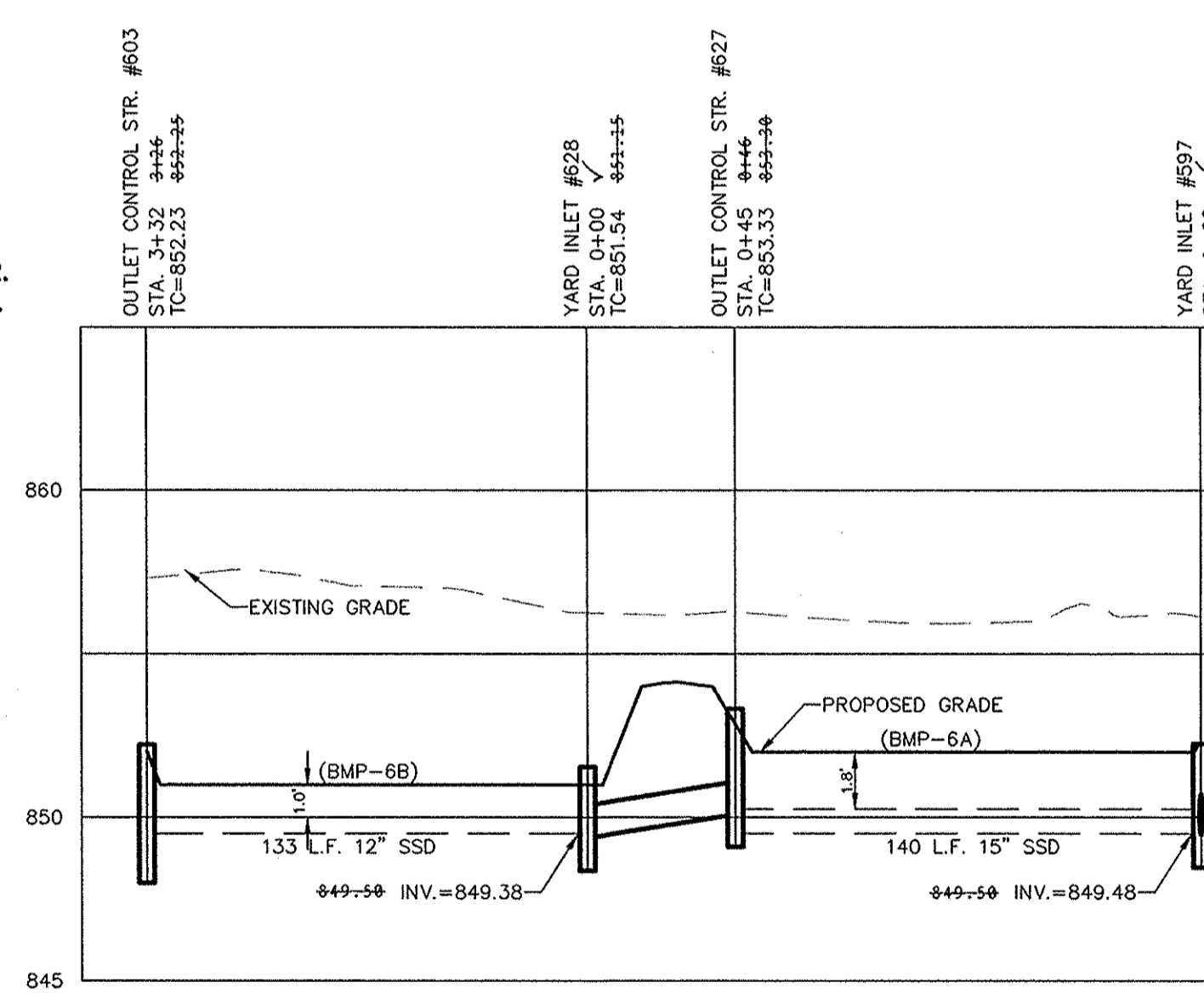
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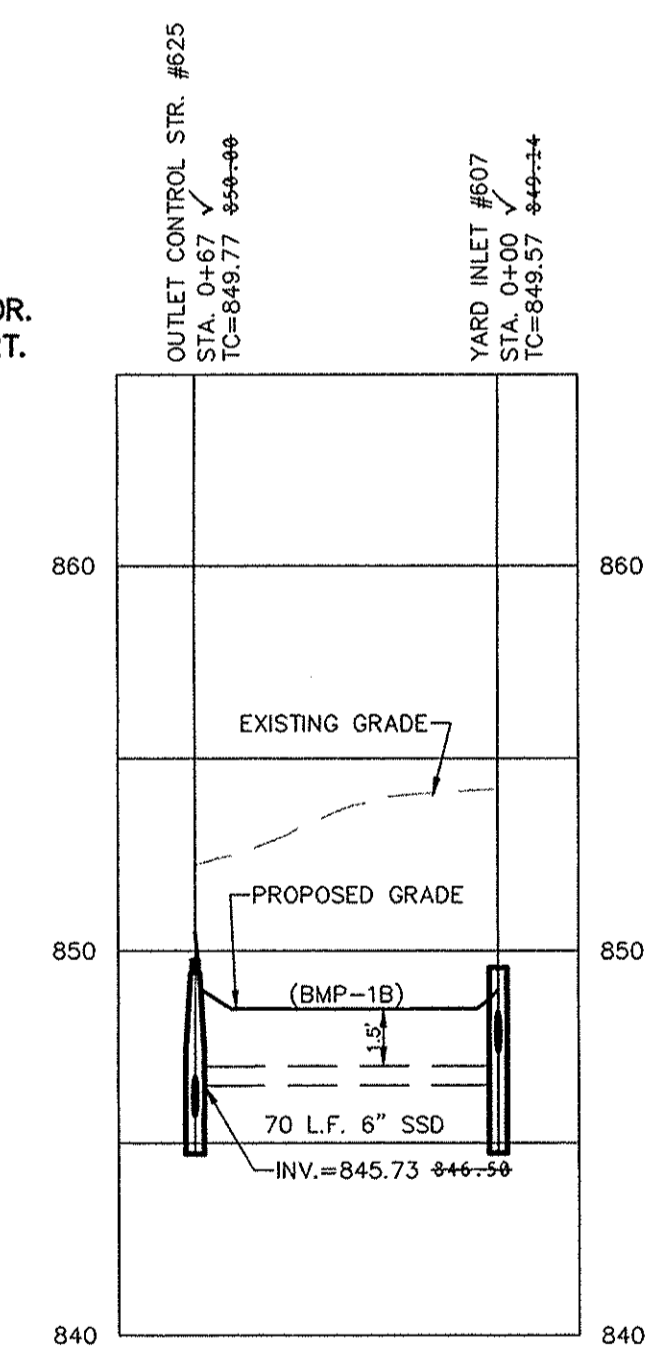
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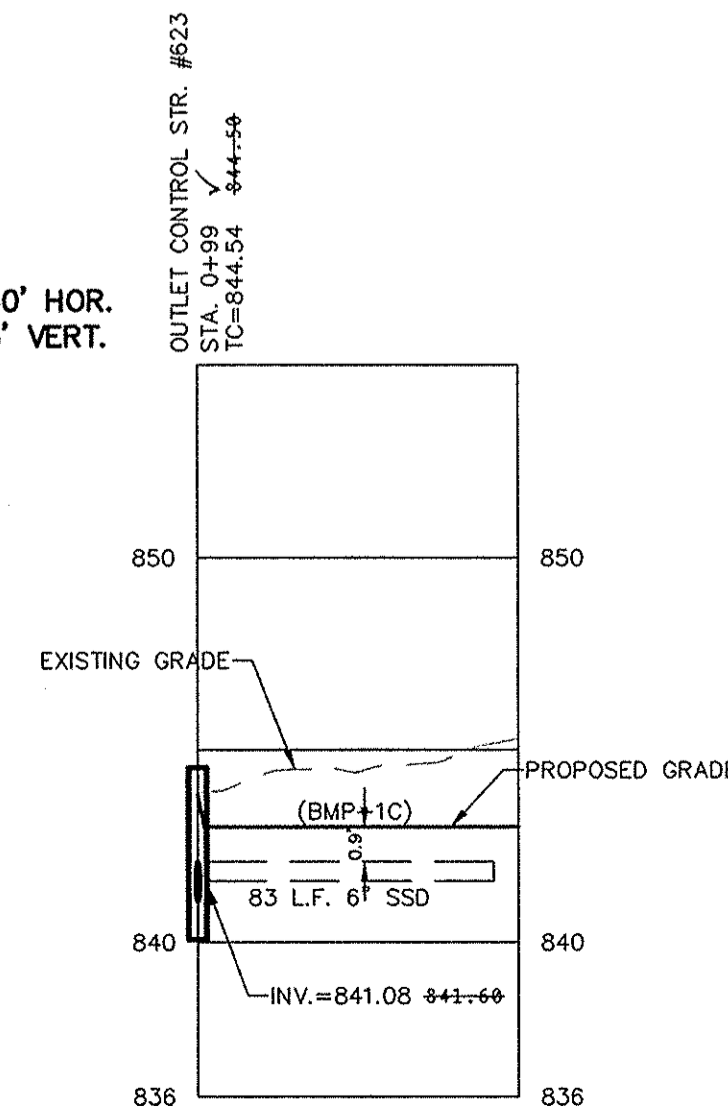
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SCALE: 1"=50' HOR.  
 1"=5' VERT.



SCALE: 1"=50' HOR.  
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 David J. Stoepelwirth  
 REGISTERED PROFESSIONAL ENGINEER  
 No. 19358  
 STATE OF INDIANA  
 CERTIFIED: 03/21/14

**STOEPPELWERTH**  
 ALWAYS ON  
 7965 East 10th Street, Ellettsville, IN 46088-2635  
 phone: 317.868.9395 fax: 317.868.5942

**SSD PLAN & PROFILES**  
**JACKSONS GRANT**  
**SECTION 1B**  
 HAMILTON COUNTY, INDIANA  
 CARMEL

DRAWN BY: JSM	CHECKED BY: BAH
SHEET NO. <b>C608</b>	
S & A JOB NO. 60160SIL-S1B	

**RECORD DRAWING**

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 Entry Date: 2/17  
 Entered By: SLM

Dennis D. Olmstead  
 Registered Land Surveyor  
 No. 900012

DENNIS D. OLMSTEAD  
 REGISTERED  
 No. 900012  
 STATE OF INDIANA  
 LAND SURVEYOR

NOTE:  
 REFERENCE SUMP PLANS C606-C607 FOR PLAN VIEWS